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TREATMENT OF PLEURAL EFFUSIONS.

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The product of inflammation of serous membranes may be said to consist of fluid and cells; the varying relative quantities in which each of these is found constituting, when the pleura is the seat of the disease, respectively, fibrous, serous and purulent pleuritis.

It is not my object to enter into any discussion of the causative and pathological relations of these, but the treatment of certain conditions shall claim our attention, and these, the presence of a small, moderate, or large amount of effusion.

Where the effusion is small, or in other words, where it is a dry pleurisy, and on the other hand, where it is extensive, the indications are decided and positive. It is the instance of a moderate effusion which forms the debateable ground.

We often find, in the course of an autopsy, a firm adhesion, an organization of the parietal with the costal pleura, the result of inflammation, yet during life no signs were evident which would point to the existence of such trouble. This is found in phthisis, where the changes are subsequent to those in the parenchyma of the lungs, a wise provision of nature to avoid the danger of more serious accidents. It is also found under the same latent conditions where the lungs present no disease. What is the inference? Simply that a pleurisy, dry, has

occasioned this condition, for it was not discovered at any time in the patient's history.

I think it may safely be inferred that a lung bound down by adhesions is not in the most favorable condition for the performance of its function; it certainly is not the original condition under which it acts in discharging its duty. Here, then, nature, ever conservative, interposes a fluid splint, separates the opposite inflamed surfaces, until the work of repair has gone on sufficiently to obviate the danger of adhesion, when the fluid is itself absorbed, and a perfect cure results. Opportune in this instance, the fluid effusion in another, owing to different casual circumstances, may, of itself, become a serious danger, because of its excessive amount. The flatness on percussion, the distant or entirely absent respiratory murmur, the increased frequency of the acts, it may be dyspnoea, either constant or paroxysmal, all tell that the working space of the respiratory apparatus is extensively encroached upon and urgently demands relief.

Simple pleural effusion, though large in amount, is usually looked upon as free from danger. Trousseau says "Pleurisy may be fatal, from the immediate effect of excessive effusion."

This tendency was well exemplified in a patient under my care a few months ago. She was twenty-four years of age, a poor woman with four children dependent upon herself for subsistence, was strong and apparently robust. In the early part of her illness she had frequently repeated chills, of short duration; there was a feeling of oppression about the chest, and the respirations were, at the same time, relatively decidedly increased in frequency; they were

about 34, with pulse 96-100, and her temperature at no time above 102° F. She was thought to be doing well under the means of treatment employed—locally various methods of counter-irritation, with such remedies, internally, as were calculated to promote absorption. The respirations continued frequent, the feeling of oppression remained, and she continued with little change in her condition, until about the end of the fifth week from the commencement of her illness, when I was hurriedly called one morning, with the statement that my patient's breathing had become very peculiar, and alarmed them much. After an unavoidably short delay, I hurried to her, just in time to see her expire. She had had a violent attack of dyspnoea, which only ended with her life. No autopsy was made, but the signs of accumulation of fluid in the right pleural cavity were unequivocal, and the amount was large.

Take *this* as the type of acute pleurisy in which paracentesis thoracis is indicated, and in which, had it been resorted to, it would have afforded a chance of saving life. Its applicability in such cases is indisputable, as the dangerous delay has shown, and it should have been early resorted to; the dyspnoea came as the herald of death, and it was then too late. Trousseau has pointed out this danger; he says, "To wait for the dyspnoea, as has been recommended, and as was formerly laid down by me as the rule, is to run the risk of allowing the time for operating to pass, and of letting the patient die, as I have done." Here pneumatic aspiration secures a positive end, that of prolonging life and of averting the imminent danger present in large serous effusions.

Where the effusion is less extensive no such danger is present, and it then becomes a more difficult matter to decide upon the propriety of this measure. These moderate effusions may be accompanied by slight general symptoms, or may be latent, or the symptoms of depression of the vital forces may be marked, the signs of a considerable amount of fluid in the pleura continue for an indefinite time, and then absorption take place, proceeding slowly, until finally, all the fluid is removed. The general symptoms, where such are marked, first improving. The extent of the flatness on percussion over the affected side, distant respiratory murmur, the displacement of neighboring viscera, all enable us to decide upon the extent of encroachment upon the lung, but what is of more importance in determining this is, the relative increase in the frequency of the respiratory acts. In a case at pre-

sent under my care, a middle-aged man, the respirations at no time were above twenty-six to the minute, and pulse 96-100. Apex beat of heart felt half inch external to and one inch below the nipple. He is now in the fourth week of his illness, the general symptoms, not exceeding a feeling of depression and weakness, have all much improved; he expresses himself as feeling nearly well, the amount of effusion is lessening, the pulmonary resonance, returning in the upper portion of the chest, grows in extent each day, and at the same time the respirations grow less frequent, are now from 20-22, and his pulse 82 in the minute. With counter-irritation, rest and such internal remedies as promote absorption, this favorable course has been secured. Of the remedies used in this and another case, whose history I shall briefly narrate, the tincture of chloride of iron, highly commended by Anstie, certainly seems to have had a positive effect in promoting absorption. It was given, diluted, in ten minim doses, every three or four hours. The other case referred to was considerable serous effusion, following acute pneumonia.

Wm. McN., age 37, had been ill nine days before I saw him. He was very prostrate, delirious and restless, a small pulse, rusty sputa, and, at times, small quantities of blood were expectorated. His temperature then was 104°, F., and he was in a profuse perspiration. Hyper-resonance, or a somewhat tympanitic resonance at the apex of the right lung, and dullness extending from below to a few inches of the clavicle. Owing to his prostrate, weak condition, not much beyond this was elicited by physical examination. Respirations were 36. Bronchial breathing and increased vocal fremitus indicated conclusively the nature of the trouble. In about seven days from the time he was first seen his condition was decidedly improved. His respirations were now 26. On careful examination, flatness on percussion was found over the whole of the right side posteriorly, and over the greater portion of the same side anteriorly. Diminished movement, the liver displaced downward and the apex beat toward the left axillary line, bronchial breathing, diminished vocal resonance, posteriorly agophony, all unequivocal signs of fluid effusion. His prostration was still evident, nevertheless he gained somewhat in strength. His temperature, it is worthy of note, assumed a somewhat curious course; for the following two weeks it was always 100° F. in the morning, and rose in the evening to 102° F. This made me, with the other symptoms present, suspect the presence of puru-

lent fluid. He had slight chills and profuse perspiration. He was taking, however, large doses of the vegetable salts of potassium, acetate, etc. A resort to a very simple manoeuvre, I do not remember where I saw the suggestion, tapping with a hypodermic needle, proved the fluid to be a clear, limpid serum. Though in this case the amount of effusion was considerable, there was no dyspnoea, the respirations being relatively very slightly increased. In about four weeks the fluid began to diminish after he had made a decided progress on the road to convalescence, and now, about seven weeks from the first onset of his illness, he is almost well. The amount of effusion is very small, and does not give him the slightest inconvenience. Let us consider the points in favor of and those against a resort to pneumatic aspiration in these cases. The general symptoms improve and the effusion is absorbed. Would withdrawal of the fluid abridge the duration of illness? We may remove the fluid, but it may reaccumulate. Is there danger that the fluid may become purulent, that might be averted by removal of it? I do not think either of these questions can be answered in the affirmative. Sometimes a serous effusion is removed by aspiration, and in a few days it becomes necessary to repeat the operation, and then pus instead of serum is found, the removal of fluid stirring up a fresh activity in the morbid process, and only fuel has been added to the flame. It has been asserted that considerable effusion becomes, as time passes on, more and more filled with corpuscles, until they are at last converted into pus. That this is not so in fact, was proved by the instance in which I withdrew fluid that had remained six weeks. Only a few lymphoid cells were found, in a clear, limpid fluid. Being not certain, then, that we do not invite an increased activity of disease by interference, I think we may conclude that aspiration fills only one object, that of removing serious and dangerous compression of the lung, and further that in it we do not possess the means whereby we may limit the length of time during which effusion in the pleura may remain, and that the only proper means to be used in effusions of moderate extent, which do not directly mean danger to life, are such general ones as we may use to influence its absorption. Among these, rest is of the utmost importance, the analogy between an inflamed joint and an inflamed pleura being striking; in the latter the rest should be as complete as possible. It seems to me, to secure this end, Dr. Roberts, in his "Practice of Medicine," has given us a valuable hint, that of firmly strap-

ping the affected side with adhesive plaster. He says, "I have found this mode of treatment decidedly efficacious in aiding toward the removal of moderate pleuritic effusions."

Should we meet with an effusion, either originally purulent or becoming so after a time, what is the proper plan of treatment? Hectic and emaciation, with prostration, show that life is in jeopardy unless prompt and radical relief is afforded. A case I had the honor of presenting before this Association a few weeks ago will illustrate this unfortunate complication. The patient, A., a young man, 18 years of age, was taken ill in the early part of June, 1881, with what was said to be pneumonia. This was accompanied by pleurisy; after an illness of ten days or two weeks, there was a decided improvement in his condition; he, however, did not sufficiently recover to leave his room; there were some vague sensations of discomfort about his chest, which continued for six or seven weeks, when he again began to fail; he grew weaker, had irregular, repeated chills, of short duration, and was, in short, very ill. Just ten weeks after the onset of his illness I first saw him, being Aug. 14, 1881. His appearance then was such as indicated extreme prostration, marked hectic, emaciation, a frequent, small pulse, and a constant cough, accompanied by expectoration of a large amount of purulent matter, one pint a day. The latter symptom had continued for a week, during which time he was said to have failed much, the constant cough preventing sleep and causing nausea, so that he loathed the sight of food. His temperature was 102° F. On physical examination it was evident that a considerable amount of fluid, presumably purulent, occupied the right pleural cavity. A hypodermic needle proved the inference to be correct. The next day a fistulous opening was made and a drainage-tube inserted. His improvement was at once noticeable, his temperature, taken before evacuating the fluid, was 102°; in the evening of that day it was about normal. Cough disappeared, his appetite returned, and his temperature for the next three weeks remained at about normal, with the exception of one day, when a slight obstruction in the tube stopped the flow of pus, when it arose in the evening to 101 F. (the injection of dilute iodine had also been omitted). He has steadily gained in weight and has grown quite tall during this time, and may be said to be slowly improving. His temperature, taken at various times of the day during the last month, does not

show any abnormal increase. There is dullness at the apex of the affected side. Dry râles are heard. Below the spine of the scapula, posteriorly and anteriorly below the third rib, respiratory murmur, though more feeble than on the opposite side, is heard. The fistula still exists; it is found to extend almost directly backward, in a plane parallel with the horizon when he is in the upright position, and between the seventh and eighth and sixth and seventh ribs, a little external to the right nipple. A soft catheter passes in eleven inches. It is narrow, and does not hold over an ounce of fluid, which is daily injected.

In this condition the pleural cavity constitutes the walls of an abscess, and the greatest hope of recovery exists in this radical measure; by it we obtain free exit for the contained matter and secure drainage. The cure is effected by granulations. Cicatricial tissue is developed, upon the contraction of which depends the retraction of the sides of the chest, which is shown to be due to an active force, and not, as was formerly supposed, to the passive influence of atmospheric pressure, which, being equal on both sides, is incapable of producing any such results.

In this connection it is of interest to quote the tabular analysis of Goodheart, Guy's Hospital Reports, 1877, given by Martindale (*American Journal of Medical Sciences*, "Empyema," July, 1881). It includes seventy-seven cases. In fifteen no treatment was used; there were two recoveries, both children; eleven pointed and discharged; there were two recoveries. The remainder, by the radical method, got well (incision and drainage tube). These, with my case, should certainly leave no doubt as to the relative advantages of a radical method of relief, as compared with any temporary means of relief that we may use instead.

THE NEW YORK CODE.

BY DR. R. C. M'EWEN, M.D.,*

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Old things are passing away, and we are called to a newer life, in the adoption of a more liberal gospel; the professional spirit, so long hampered by the hidebound restrictions of a primitive ethical code, is to become regenerate, and the broad banner of legal enactment is raised as the standard of scientific qualification. The new code of medical ethics adopted by the Medical Society of the State of New York is now the subject of discussion within and without the pro-

* An address delivered before the Saratoga County Medical Society, by the President.

fession. To the laity, who regard the science of medicine as founded upon some particular dogma, and each individual practitioner as the representative of a system, its liberality is hailed as evidence of advance, and we are considered to have broken the fetters that bound us; to have laid aside the bigotry and intolerance that paid so little deference to the more modern scientific methods, and, at last, to have granted them the recognition they deserve. The secular press has expressed its unqualified approbation, and the editorial pen pictured, in glowing terms, the benefit to all mankind that shall flow from the deace of an antiquated form, and the birth of a spirit more in accord with the liberal idea of the age, and the toleration that should characterize a truly progressive, scientific spirit.

The new departure is held up to professional favor by but a small portion of the medical journals of the country. Its champion is the *Medical Record*, of New York, a prominent journal at the reputed birthplace of this liberal doctrine, and, editorially, it has set forth its satisfaction with the independence of the position, and its expectation of the coming day when those who now see through a glass darkly will accord the honor due the pioneers in so magnanimous and so radical a reform.

But from the medical press at large and the profession itself, from Maine to California, comes forth an earnest protest against the action of our State Society, and a demand that at the coming meeting of the American Medical Association the profession shall make known its position by the exclusion of the delegates from our State Society from that body, by a repudiation of the leveling doctrines of the new laid code, and a re-assertion of continued adherence to the faith of our fathers, rather than recognize the claims of pseudo-science to equality of position; rather than accord to imposition the genuineness of truth, or raise the traders in a name to the level of honest and sincere representatives of scientific progress. The act of the State Society is a repudiation of a governing principle of the national body, and a departure, in the name of tolerance, from a wise conservatism that is opposed to professional affiliation with irregular practitioners. It gives to State law the precedence in determining who shall be recognized as entitled to practice, and admits the legally qualified (if such there be) to all that has been accorded the educated physician. It is a denial of all that scientific medicine has claimed for itself in the rejection of so-called systems of practice, and bows, in a spirit of mock sentimentality, to

the fictions of science, apparently sustaining a fraud in order to pocket a fee. The action of our national body is looked forward to with anxiety, and we wait to learn whether the old and tried shall have passed away and we are to be left to the disintegration that will follow the new. For the old we do not claim perfection, but better that, with its conservative and protective barriers, than the chaos of so liberal a departure from all restrictive influence. It is claimed that the new-made code is begotten in the interest of the specialist, who, in the name of progressive liberality, seeks to enlarge the borders of his usefulness and the contents of his pocket-book; that it was passed by but a minority of the members of the State Society, and is in defiance of the wishes of the majority. If so, let it be repealed at the annual meeting in February next, and the seal of disapproval be placed upon the act of a minority who seek to honor the representatives of a scientific fiction, in order that they may promote individual interest. It is idle to discuss the question of benefit to mankind from consultations with irregular practitioners.

The patient, in his critical condition, cares not a fig for the refinements of pathology, or a professional agreement on questions of diagnosis. The differences between the claims of scientific medicine and the dogmas of the day are not to be reconciled while the patient waits, and the impassable gulf between the true and the false is not to be closed by a shaking of hands over the chasm, in the interest of a suffering humanity. The physician of the so-called *regular* profession is classified as belonging to the old school. Ethics and therapeutics are more particularly held up to adverse criticism, the one interfering with a liberality hailed as evidence of progress, the other considered as weighed down by the dust of age, and founded upon principles that will not bear the test of rational examination. That defects exist in the code, which disturb our relations to the so-called modern medicine, and that it demands revision and readaptation, may be conceded. But in what respect can the claim be sustained that the science of medicine of to day is in any sense a theory of the dead past, or that its principles rest upon foundations that have been superseded by newer light in the dilutions of infinitesimalism. We are reaching forth, from day to day, to better things, and walk in the light of new developments. The hand of science points to new discoveries, that are as strange in the medical world as are those in other branches of scientific pursuit. But they are not born of dogmas, they owe no allegiance to

"*similia similibus*" or "*contraria contrariis*," and reflect no tenet of sect or practice of schools. They stand on the broad basis of inductive science, and are the rounds of the scientific ladder upon which we rest, reaching out toward further development and greater practical results for the benefit of mankind.

A knowledge of anatomy was essential to progressive medicine, and the history of its rise and development, is coincident with more scientific modes of thought and study. Physiological investigation followed the better knowledge of form and structural arrangement, and the light shed upon the vital processes through physiological anatomy, enabled the pathologist to understand more clearly the changes in intimate structure incident to the various departures from normal condition that constitute disease.

The history of medical science, as it portrays the brilliant labors of the past, presents a page that brightens with each advancing age. We treasure up the heritage left us. The ties of tradition are not severed, but new horizons are opened up to our view, and in the light of the past we search for further knowledge from the standpoint of the present. By way of illustration, let me point you to the experiments of Pasteur, and their bearing upon the germ theory of disease. That we are surrounded by invisible germs, capable, under favoring circumstances, of producing disease and death, is no longer a theoretical view of our pathological relations. The mode and manner of their production in the animal and vegetable world, the laws which govern their vitality, the circumstances which modify the intensity of their action, and the relation various forms bear one to the other, are still subjects of investigation.

As remarkable as any of the developments recently brought forward are those set forth in the paper recently read by Dr. Koch, before the Physiological Society at Berlin, claiming to have discovered a specific germ as the cause of pulmonary tuberculosis. He endeavors to prove the truth of his views by the test of inoculation with a ferment containing the germ or bacillus tuberculosis, and as a result of such experimentation asserts the contagious and infectious nature of the disease. What a departure is this from the theory of blood dyscrasia and the deposition of gray tubercular matter, as set forth by the German pathologists, from the caseous degeneration of Niemeyer, or the more recent view of catarrhal inflammation, with its infecting foci of disease in a subject already scrofulous. We have mentioned these

investigations in illustration of that spirit abroad in the science of medicine seeking to know and develop the things that lie beyond the horizon that now limits our view. A spirit that pervades and leavens the professional body, raising it above the isms and pathies of the day, pointing us backward to the landmarks of scientific investigation that were progressive steps in the past, giving us the practical certainties of to-day, surer foundation stones than the innovations of so-called modern scientific medicine.

HOSPITAL REPORTS.

HOSPITAL OF THE UNIVERSITY OF PENNSYLVANIA.

CLINIC OF WILLIAM PEPPER, M.D.,

Professor of Clinical Medicine in the University of Pennsylvania.

Reported by WM. H. MORRISON, M.D.

NIGHT TERRORS OF CHILDREN; RENAL CALCULUS; PYELITIS.

GENTLEMEN:—The first case that I shall show you to-day is this little boy. I do not know his history, but I shall ask the father a few questions, and you can note the answers.

He is three years old; the third of four children; the others are living and healthy; the father and mother are healthy; the mother is somewhat nervous; the child was healthy when born; neither this child nor the others were nursed at the breast; the child grew well but did not develop rapidly; he was twenty-two months old before the teeth began to appear, and he still lacks one. Examining the mouth, I see that the teeth are well developed but rather peculiar in shape, showing a want of development of one lobe of some of the teeth. This affects chiefly the molars, which are curiously shaped and pointed. The lower right lateral incisor has never appeared. His dentition, then, has been singularly irregular, retarded, and is still imperfect. In other respects he looks like a sturdy child. The head shows no signs of rickets nor of hydrocephalus. The features are well developed. He eats well. The bowels are now regular. During his first and second summer he had sharp attacks of cholera infantum. The abdomen is somewhat prominent. The abdominal walls are quite fat. There is no enlargement of the liver nor of the spleen. There is no distention of the abdominal veins, but there is an unusually thick deposit of fat for so young a child. A great deal of the prominence of the abdomen depends upon this fat, while there is only that degree of distention of the intestine depending on the imperfect development of the muscular layer of the intestinal wall, that we constantly meet with. You frequently see bellies as large as this in children who have been disposed to diarrhoeal trouble during dentition.

Recently we have had nerve symptoms developing. He first began to have nervous attacks four weeks ago. The father states that he was

awakened at midnight by his wife, and found the child rolling its eyes, and also noticed some contortion of the body. There seemed to be some unconsciousness, for the child did not reply to the questions put to him. He soon came to, and then went into another attack of the same character. This lasted for two or three hours, and finally stopped after the child's feet had been soaked in strong mustard water. In one of these attacks he cried out, "See there! there! there!" and in moving around he caught hold of his father's hand, and immediately began to cry and scream, as though he had touched the dreaded object. He has had two of these night attacks. The last one did not last as long as the first.

In addition to the night spells the boy has had day terrors; that is, he will, while playing, quit his play, run to his mother, seem frightened, and say that something is after him. He never says what it is, excepting at the last spell, when he said that there was a man up stairs who was going to hurt him. At these times he does not work his body, and the parents do not notice anything strange about his appearance. He does not seem to lose consciousness. He does not cry out. When his mother reassures him, the spell soon passes away, and he returns to his play. The railroad runs a short distance from the house, but the father thinks that the child was never frightened by the locomotive, nor in any other way. Once, when a train went by, he said that it was going to run over him.

This is an unusual case. You are probably all familiar with what are termed night terrors in children. They are spoken of as night horrors, and as nightmare. The best term is night terrors, which explains them exactly. They are most common in children, but I have known them to extend beyond childhood, even into adult life, but I have never known them to come on in adults who had not, as children, suffered from the disease. Although they occur most frequently during the night, they may also occur during the day. Their characters are rather uniform. I shall describe the commonest sort. A child who has apparently been well, but perhaps a little irritable and peevish, is put to bed and goes to sleep as usual, but wakes up in the earlier part of the night, say about ten or eleven o'clock. Generally the first thing that attracts attention are cries, incoherent screams and strong expressions of terror from the child's sleeping room. On running there, the child is found, nearly always, in some unnatural position, rarely lying still, but sitting up, or standing, looking very much frightened, holding itself in a strained attitude, screaming, sometimes incoherently, but at other times with a definite purpose, as; "Take that big black dog away!" or "That snake is going to sting me!" or "That man has a knife to cut me!" and the like; or the child may simply cry and scream, evidently in great terror, but without any coherent purpose. You call the child and shake him, but it produces no effect. The child is beyond the reach of reason, and does not seem to hear. Often the eyes are wide open and staring, but you cannot attract the child's attention. Holding the child seems to increase the terror, the child thinking that the

dreaded object has seized him, thus showing complete want of recognition of the nurse or parents. After a few moments, simply seeing that the child does not hurt himself, speaking gently, without touching him, the child begins to take long breaths, and very often says that there is nothing the matter, throws himself down, and almost immediately goes to sleep. Others will, after they come to, say "Where am I?" be somewhat nervous, but with a little soothing, lie down and soon go to sleep. There is not usually a second attack during the same night, but there is apt to be a recurrence of the attack at longer or shorter intervals.

I have seen attacks similar to this take place in the daytime. I remember a case that I saw last September, during the very hot weather. A child, eight or nine years old, of delicate nervous organization, and precocious intellectual development, rather frail, who had been subject to gastric catarrh, with frequent vomiting, lasting for several years, and for whom it had been found difficult to select a suitable diet, had been sent to the seashore. On the trip home she seemed excitable and nervous, talked incoherently, and seemed greatly afraid that an accident might occur. Reaching this city, she was taken to her residence, and very soon she suddenly went into a state of uncontrollable terror. I saw her a short time afterwards. Her body was bathed with sweat, she had torn off most of her clothing, she was trembling violently, and it was with great difficulty that she could be restrained from throwing herself on the floor. When the paroxysms would come on, she would exhibit great dread that a large dog would bite her. Some time previously she had been much interested in a large dog. At these times it was almost impossible for me or her father to hold her. She would tear the clothes from herself and those who held her. During these spells she seemed entirely inaccessible to calls, persuasion, or soothing. These attacks, under the influence of remedies and soothing treatment, gradually diminished, and on the following day she was herself again. I had never before seen as bad a case of day terrors, associated with prolonged hallucinations and delirious spasms, as the one I have described, but I have seen a number of cases where the terror occurred during the day. These attacks you will find, for the most part, connected with derangement of the digestion, and an over-sensitive, nervous system. You will ordinarily find them occurring in children with an excitable state of the nervous system, derived from the parents, or due to the depressing effects of severe illness or defective nutrition. In addition to the state of the nervous system we have, as a rule, local irritation, for the most part connected with the gastro-intestinal canal. Over-eating, or an indigestible meal, will bring on night terrors in a child so disposed. So, in the case of which I have spoken, there had been a long continued gastric derangement, and the diet had not been properly regulated. Irritation of the genito-urinary canal may bring on an attack, and sometimes they come on after some excitement, fatigue, application to study, and the like.

These attacks are in some cases analogous to one of the types of hysteria. In other cases they

are analogous to epileptiform seizures. There is a considerable irregular muscular movement, and, for a moment, there is a form of unconsciousness. The attack passes over and the child sinks into a deep sleep. There is not the frothing at the mouth, the biting of the tongue, nor the true convulsive movements, *i. e.*, incoherent involuntary contraction of the muscles, that we see in true epilepsy, but I have said enough to indicate the analogy.

With this much as a preface, you will, in reference to the present case, see how difficult it is to define the nature of the attacks. For instance, the day attacks are very peculiar. They seem to be the result of some fright that this child has had. It is not improbable that the child has been frightened by the cars or the loud blowing of the whistle. Of course, if the child had been of a vigorous nature this would have had no effect. The terror may often be produced by excitement in playing, or by fatigue, or by reflex irritation from overloading the stomach, or by injudicious food.

We might think that these day attacks were attacks of *petit mal*. Lesser epilepsy sometimes takes this form. There is in this disease an instantaneous, giddy, disagreeable feeling, the person grasps something or lies down, draws a few breaths, and the attack passes over. If such a spell occurred in a child we can easily understand that it would cause a feeling of terror in the child, it would run to its mother, and by that time be apparently well. It is, therefore, doubtful, I think, whether these are attacks of terror or attacks of *petit mal*. The nocturnal attacks much more simulate a modification of epilepsy than ordinary night terrors. This child goes to bed and awakes with a scream. On going to him he is found in a somewhat convulsive state, with momentary unconsciousness. A convulsive condition of the muscles is not common in night terror. This child passes from one attack to another, each spell closely simulating the previous one. On the first occasion they lasted for several hours. During these attacks the child seems to be very much frightened.

I think that it is possible to explain the night seizures as attacks of night terrors, although exhibiting unusual features, and the day attacks may be peculiar expressions of some condition of over sensitiveness of the nervous system, with past frights in which very trifling causes bring on momentary terror.

As to the Treatment.—The tongue is moist and coated. The bowels are somewhat irregular. He sleeps well. His diet consists principally of bread, butter, soft-boiled eggs, and weak coffee. It is now two weeks since the last night attack. During the last ten days he has had only one day attack. Previous to that he had them every day. I should, in the treatment of this case, first endeavor to regulate the diet. I should not give coffee under any circumstances, but urge the child to take milk diluted with an equal quantity of water; I should allow him a soft-boiled egg, once a day, meat, roast potatoes, fine grits, bread and butter, and milk and water.

Direct Medication.—I think, taking the history in connection with the symptoms, that we have

had, undoubtedly, a long continued irritation of the stomach and bowels, an exaggerated sensibility of the nervous system, and from some cause, a defective state of nutrition, a defective developmental power. I should give him a teaspoonful of the emulsion of cod-liver oil and hyposulphites after meals. I should then use one of two sorts of remedies. Either remedies directed to the nervous system, and of these, I should select one of two, either the bromides by the mouth, or quinine and assafoetida by the rectum. I should give a suppository containing—

Quinia sulphatis
Assafoetida āā gr. iss.

or, if this irritated the bowel, it would have to be omitted, and I should give—

Potassii bromidi
Sodii bromidi āā gr. iss.

in a little calisaya elixir, three times a day, between meals, or, in the second place, if I found, under close observation, that this child's digestion was not right, that the stools were broken, irregular in color, and imperfectly digested, and that there was a good deal of flatulent distention of the bowel, I should not give the remedies of which I have spoken, unless, perhaps, a little quinine and assafoetida at night, but I should give remedies directed to the mucous membrane of the stomach and bowels. These would be either pepsin and bismuth, or oxide of silver. This is the class of cases, either of spasmodic nervous trouble or of epilepsy associated with gastro intestinal irritability, where the salts of silver have earned their reputation; nitrate of silver is considered by the laity as one of the most reliable remedies in the treatment of epilepsy. Nearly all the cases, if not all, that have been cured by this drug, have been cases in which the attacks have been reflex from irritation of the gastro intestinal mucous membrane. If this child, on careful examination, presents evidences of a long-continued subacute irritation of the stomach and bowels, I should give from one-twelfth to one-eighth of a grain of oxide of silver in a small pill, or else one-twenty-fourth grain of nitrate of silver in solution. With this I should give the cod-liver oil, regulate the diet, keep him where he would not be frightened by the cars, and be very careful that he did not get over-fatigued or excited.

Renal Calculus, Pyelitis.

Our next patient gives us the following history: He is 42 years old. His parents are dead. One died of dropsy. He has never passed a stone. Five years ago he noticed a sudden attack of pain, which began over the right kidney. Since then he has had a good deal of pain over the kidney, and more or less pain running into the bladder and genital organs. He first noticed a change in the urine three or four days after the first attack. There were a few spots of blood, and there has been, occasionally, a little blood since.

Cases of this kind are so common that it will repay us to give a good deal of careful study to them. There are some very curious features

about them, in their symptomatology, course, and the results of treatment, to which I shall call your attention.

The first question to decide is whether this man is suffering from a disease of the bladder or of the kidney. The man tells us that he has a good deal of pain around the kidney and down into the bladder, and that he finds a thick, white sediment in his urine, and sometimes a little blood. These are symptoms which are met with in disease of the bladder and in a certain kind of disease of the kidney. The disease of the kidney is not that which we call Bright's disease in any of its varieties, but it is a chronic inflammation of the pelvis of the kidney and upper portion of the ureter; in other words, pyelitis. It is the same sort of disease as cystitis, *i. e.*, an inflammation of a mucous membrane. We proceed, then, to ask ourselves: Where is the seat of this mucous inflammation? Is it in the bladder or is it higher up in the urinary passages? The elements upon which you will base your diagnosis are chiefly, (1) the seat and character of the pain; (2) the evidences of the presence or absence of irritability of the bladder; and (3) the chemical and microscopical characteristics of the urine.

The Seat and Character of the Pain.—In cystitis there is a great deal of burning and tenderness about the vesical region, and from time to time, when the disease is aggravated, there is aching extending up toward the kidney. In pyelitis, on the other hand, the pain, with great constancy, is found in the renal region, and extends often along the course of the ureter into the bladder and groin, attended with drawing up of the testicle and pain in the end of the penis. The retraction of the testicle and pain in the penis are not so constant as the location of the pain in the renal region, and its tendency to extend along the ureter. In addition to this there is, in the intervals between the sharp attacks of pain, dull, deep-seated pain over the kidney and tenderness on pressure, so that if we direct the patient to lean forward and press over the kidney, we find, on one side or the other, decided soreness. Often you will find that any sudden jar to the patient's body will give him pain in the renal region. The amount of pain will be governed, in the first place, by the severity of the inflammation and by the irritability of the parts, and secondly, it is governed very much by the presence or absence of a calculus in the pelvis of the kidney. If there is but one smooth stone, imbedded firmly, there may be very little pain, but if the stone is jagged and free to move, the slightest jar will cause extreme pain.

You will gather from this that the seat and character of the pain, the presence of renal tenderness, and the comparatively slight amount of pain over the bladder, will cause you to think that it is the pelvis of the kidney that furnishes the pus, and not the lining membrane of the bladder.

In regard to the urine. I here show you a sample of it. It contains a thick, white sediment, which, on shaking, diffuses itself through the liquid. This shows that it is pus. Mucus, on agitation, forms little masses, which float around in the urine, but it does not break up and

diffuse itself, like pus. This urine is albuminous, loaded with pus, contains amorphous phosphates, some urates, but no tube casts. In cystitis the urine is apt to be fetid, and the deposit nearly always consists largely of stringy, ropy mucus, and on microscopic examination we find a great deal of mucus with a moderate amount of pus. In pyelitis there is little or no mucus but a great deal of pus.

The most frequent cause of pyelitis is the formation of a calculus. It may also be caused by repeated chillings of the surface and the establishment of catarrhal pyelitis. This latter cause is more apt to give rise to cystitis. If only one kidney is affected the cause is probably a local one.

While the symptoms to which I have referred are the common signs of calculous pyelitis, there are other symptoms which I have noticed in some cases, and which are very misleading. I remember a case which occurred several years ago. A man of gouty diathesis and intemperate habits was seized with a headache which continued without the slightest intermission until his death. Nothing relieved it. There were no symptoms of organic disease of the brain. There was no syphilitic nor malarial history. No toxic poisoning of any kind. He was tried with large doses of quinine, large doses of arsenic, with the iodides and the bromides, codeia, aconitia, gelsemium, counter-irritation of the most severe type, localized galvanism of the brain, change of scene, with every influence that could be brought to bear, but the pain continued without change until he at last sought relief in morphia. From the occurrence of the headache until his death he had not an instant's ease, except when under the influence of morphia. After death, the most minute examination of the brain was made, but there was nothing found but a little thickening of the dura mater. In the kidney there were found twelve or fifteen calculi imbedded in its surface. I never knew whether they had anything to do with the pain or not, but that was the only lesion found in this man's body, who had suffered from the most severe headache for four months. There was no pyelitis.

The other day I saw a case in which there was a floating kidney, containing a calculus. The woman had complained of vomiting, and not rarely vomiting streaked with blood, and progressive emaciation. Cancer of the stomach had been diagnosed. At the autopsy, the stomach was found to be normal, and the only lesion was the renal calculus in the displaced kidney.

Occasionally you will find a hectic irritation kept up in these cases. There may be remittent or intermittent febrile paroxysms, with night sweats, progressive anemia and emaciation, simulating the condition which we find in deep-seated abscesses. This is caused partly by surface irritation, and partly by the presence of some septic material in the blood. You find in these cases a great dissimilarity, both in the general and in the local symptoms. Sometimes the local symptoms are very marked, at other times these are very much in abeyance, and the reflex symptoms are very prominent.

Given, then, a case of pyelitis, we desire to know whether or not there is a calculus. It is often

difficult and sometimes impossible to determine this with any degree of certainty. I would say that we determine this, chiefly, by the amount and extent of tenderness, the amount of pain following agitation of the body, and the frequency with which the urine is blood-stained, or contains macerated blood corpuscles. When there is a calculus, a little blood is apt to be passed. It is macerated by remaining in the urine, and the microscope reveals the altered character of the blood corpuscles, showing that they have not come recently from the bladder. It is not discharged in clots, as in cystitis. It sometimes gives a light pinkish hue to the urine, but at other times it does not color it at all.

Our treatment is governed by these considerations: whether there is or is not a calculus, by the severity of the local inflammation, and by the character of the general symptoms. If there is clearly a calculus, and we have waited for some time, but there is no sign of its coming away, and the symptoms are very urgent, it is impossible to avoid considering the question of cutting down on the kidney and removing the calculus. These are the cases in which nephrotomy is earning a just position for itself among surgical procedures. A large number of cases have been operated on, with an encouraging proportion of successes.

Can we do anything to favor a solution of the calculus? I doubt if there is any form of mineral water, or any remedy, that can lessen the size of the stone. The only way in which this could be done would be indirectly, by favoring a healthier state of the mucous membrane of the pelvis.

Rest is, unquestionably, one of the most important elements in the treatment. This may, with advantage, be absolute, for a considerable period. There is no harm in keeping such a patient in bed for several months. Secondly, whether this is done, or not, a most rigid attention to hygiene and an avoidance of those little exposures which are apt to favor catarrhal attacks are necessary. In the next place, the diet requires close attention. It should be simple and unirritating. One which neither contains such substances as are irritating to the kidney, as alcohol, highly flavored dishes, articles containing spices, and the like, nor, on the other hand, articles which load the urine with a great deal of organic matter, as very rich, sweet and heavy dishes. It should be one which will promote the free secretion of urine.

Unquestionably, a milk diet is, on the whole, the best. It is desirable to place such patients upon a diet of milk, whey, a little farinaceous food, and a little animal food, as eggs, and tender, lean meat. Rest, rigid diet and hygiene put the patient in a very favorable condition for having this inflammation healed.

Besides this there are drugs which undoubtedly exert a beneficial influence upon this membrane. In the first place, those drugs which keep the urine neutral or slightly alkaline, and promote a free secretion of urine, are useful. For this purpose we may employ many of the saline mineral waters. As a type of this class I may mention Vichy water. This is an agreeable, powerfully alkaline, and very unirritating water.

Then there are waters which are alkaline and chalybeate. These are exceedingly valuable. If Vichy water is used, you may give iron associated with it; or you may give iron in combination with an alkali, as, for instance, a vegetable salt of iron, with potash; or Basham's mixture may be employed.

There are other drugs, the so-called alterative diuretics, which have a beneficial action upon the urinary organs; thus, uva ursi, buchu, copaiba and sandal wood, may be mentioned as examples of substances which, taken into the stomach and absorbed, are excreted by the kidney, and thus mix with the urine, forming a slightly stimulating solution, which bathes, day and night, the irritated surface. Thus, in a case where there is not much urgency, and where the simple hygienic tonic course does not relieve the discharge of pus, it is proper to associate one of these alterative diuretics, and they may modify favorably the inflammation of the mucous membrane.

Anything which modifies the character of the urine and allays the irritation, reduces the amount of pus and lessens the deposit of organic matters and urinary salts upon the calculus, and therefore, under the slow action of the urine, the stone may be gradually worn away until it is small enough to be discharged, so that, indirectly, this treatment may lessen the size of the calculi. I have seen this occur not rarely.

More commonly another result takes place. The irritation and the amount of pus may diminish, the calculus still remains, but adhesions have formed, and it becomes encapsuled. It may block up the openings of one or more tubes, leading to cystic degeneration of the kidney, or it may lie in such a position as to offer no impediment to the passage of the urine.

Lastly, the stone may remain almost indefinitely, and the patient enjoy fair general health, as long as he pursues a very careful hygienic course. A certain amount of pyelitis persists, the urine always contains a little pus, a slight cystic irritation remains, and the patient, on the least indiscretion, is warned of his danger by an attack of colic.

In this patient we have reason to suspect a calculus, but the symptoms are mild. I shall put him on the treatment which I have described, and shall continue it for several months.

MEDICAL SOCIETIES.

NORTHERN MEDICAL ASSOCIATION OF PHILADELPHIA.

Do Mammary Adenomata Undergo Carcinomatous Degeneration?

BY HENRY BEATES, JR., M.D.

Mr. President and Members:—This type of neoplasm is still spoken of, by representative continental pathologists, in a manner which clouds the mind with erroneous conceptions, and it is with the intention, so far as my experience and observations enable, to clearly describe and consider the clinical and pathological

phenomena of the tumor, that I present the subject for your consideration. The title is selected because it gives prominence to a vital point in the history of these growths, and also that an opportunity has recently been afforded me to conclusively determine the affirmative of the mooted question. The consideration of the many neoplasms classified as adenomata or prefixed with the name adeno — —, will here be omitted, as our works of reference sufficiently abound with the confusing literature of the subject. Billroth, Green, Cornil and Ranvier, Wagner, Paget and others, refer briefly to mammary adenoma, and while assigning to it identity, emphasize the fact (?) of its great rarity. The accumulated statistics of many surgeons, for years, afford us a history of but fourteen cases, and 'were these typical tumors, alone, admitted to have occurred, we would certainly have to deal with a most extremely rare growth. That the tumor is comparatively rare cannot be gainsaid, but that it is of far more frequent occurrence than statistics indicate is certainly a fact. Many mammary tumors, microscopically determined to have been adeno-myxoma, adeno-fibroma, adeno sarcoma, etc., etc., will, I think, by future experience and study, prove to be either adenomata, undergoing these secondary changes, or true primary myxomata, fibromata, etc., etc., developing, as this type of neoplasm does, from the connective tissue of the gland, and permeating the true adenoid structure and separating the acini in such a manner as to present appearances sufficiently misleading to occasion errors in diagnosis. Note here, that these compound neoplasms are composed, histologically, of true gland structure plus connective tissue new formation, and that there is a broad difference between these and carcinomata, which develop from epithelial structure alone.

In this connection it may be proper to refer to a form of tumor, or more correctly speaking, lumps, which occur in the breasts of ladies in active catamenial life, that in no sense constitute adenomata, although requiring close observation and care lest they might, by irritation or injury, eventually become morbid. Reference is made to those instances, certainly of frequent occurrence in the experience of every practitioner, of lumps that are located in segments of the mammary gland, which, upon examination, are found to be enlargements of one or more lobules, due to either stenosis of efferent ducts, congestive thickenings, etc., and which during menstruation become markedly increased in size, hyper-sensitive, and even painful. These enlargements are of irregular contour, capable of being freely grasped, and when lifted elevate the whole gland, demonstrating clearly that they are of the gland itself. Comparison with the unaffected side gives no evidence of hyperplasia. The difference of sensation imparted by these and true adenomata can only be interpreted by comparison, for it must not be forgotten that the true neoplasm is a new formation of the gland itself, and when grasped and lifted also elevates the whole breast. The evident attachment by a pedicle is a point for differentiation. That many of these lumps have existed and after the menopause disappeared is a truism needing no demonstration. That

many tumors presenting almost the same phenomena as the above have existed, and at the menopause not disappeared, is also true. That the former variety of lump has been recognized and known to disappear, and confounded with the true neoplasm, is a sufficient explanation of the indecision of the profession regarding the treatment. Many instances are called to the minds of all, of tumors, very vaguely called, and as indefinitely diagnosed, that have been removed, returned, or not, some successfully, others with fatal consequences, and we have formed conclusions pro and con, unconsciously regarding them as confirmations of opinions which, when analyzed, shine with inconsistency and ignorance.

What a degree of doubt burdens our minds when forming a diagnosis and recommending a plan of treatment! How we await the time when unequivocal manifestations of malignancy occur, to confirm a dread, or if perchance it may happen, disappear, and relieve us of further responsibility! What visions of cancer return, metastases, etc., cause us to hesitate, yet opposed with an indefinite recognition, that conservative treatment may find us off guard and surprised with malignancy, which, if it had been properly treated, would have saved our patients, harass our minds, and attest the ignorance of this subject! Because Mrs. A. had a breast tumor for 20 or 30 years, that disappeared at the menopause; Mrs. B. one of 10 years' duration, that was removed and has remained perfectly well for 20 years, shall we tell Mrs. C. that her's, so far as our senses enable us to determine, is identical, and that as Mrs. A.'s vanished and Mrs. B.'s did not return, and was, therefore, not cancerous, it would be folly for her to undergo the risks of a surgical operation? This might be done if we knew that adenomata did not become carcinomatous, and were certain of a correct diagnosis, for it must not be forgotten that the nature of the tumor present is very frequently not understood. A thorough knowledge of the histology, clinical history and pathology of adenoma will clear many doubts, enable an unbiased opinion to be formed, and a proper plan of treatment advised. As the affirmative of the question is herein maintained, and per consequence, the extirpation of the breast advised, attention is invited to the histology of typical adenoma, in order to secure just approval or condemnation. This rough diagram illustrates sufficiently clearly the structure of the normal gland.

Special points noticeable are, first, the small proportion that the connective tissue bear to the acini; second, the few fusiform cells in the wall of each acinus and interlying connective tissue; third, the almost uniform size of acini; fourth, the membrana propria, which is the true basement membrane, upon which are situated the epithelial cells, which constitute the fifth object of notice; these cells are somewhat columnar, bear a constant relationship of breadth to height, and possess nuclei; sixth, spaces between the acini, which seem to be separations of the inter-acinous connective tissue, that are lymph channels, and serve an important factor in carcinomatous changes, as the proliferated cells congregate here, and thence are conveyed through the

vessels (lymph) to the contiguous glands. The epithelium constitutes the secretive element, and elaborates from the blood, the lacteal fluid. The gland is in full sympathy with the reproductive system, and during the catamenia becomes hyperæsthetic and even painful. This is due to hyperæmia, and is of interest, in so far as the general belief, that when more blood exists, then do we have excessive development, is concerned, and the possible etiological factors thus suggested.

This describes the appearances presented by the section under the microscope, of pure adenoma. The only difference consists in an increased proportion of connective tissue, and a greater number of fusiform cells. A greater tendency to formation of fibroid tissue is seen. The lumen of each acinus is seen to be occupied with epithelial cells, such as we presume to be the fact in a gland secreting milk. The only difference here, however, being the freedom from fatty elements. Notice especially that the membrana propria is intact, and that the lymph spaces are empty.

Comparison of this with the former demonstrates vast histological differences. The connective tissue is increased, the fusiform elements more numerous, and lymphoid cells infiltrate the whole structure. The lymph spaces and vessels are distended with large, multinucleated, irregularly shaped, epithelial cells. The membrana propria is destroyed, and can only be recognized in portions of some few acini.

In a normal lymphatic gland nothing is discernible but a field of lymphoid cells partitioned into small, circular areas by a delicate fibroid stroma. These glands, when the seat of carcinomatous changes, present a typical appearance of malignant cancer, which, as you know, consists of stroma made up of fibroid structure arranged in bands joining, at acute angles, with the spaces thus formed, filled with epithelial cells of irregular shape, multinucleated and aggregated. This is represented by the next diagram, and can be recognized by the slide under the microscope.

This gives a fair representation, and clearly demonstrates the vast change that occurs in malignant degeneration. The transformation is so complete that, were it not known to be a section of lymphatic gland, it would be impossible to state whence the specimen was derived. The section you are viewing is taken from an axillary lymphatic gland. The history of the case will be given later. The adenoma is shown to offset the general belief concerning the "extreme rarity" of their occurrence and that the changes above referred to may be seen and recognized by all.

The history of this case, diagram No. 2, is as follows: Mrs. B., aged 49, married, nulliparous, has always enjoyed excellent health until three years ago (four after the menopause), when she first discovered a lump occupying the outer and lower two-thirds of the right breast. This was not painful, and remained about the same size until ten months before relief was sought. At that time a pain, lancinating in character and aggravated nocturnally, developed and slowly became more severe and exhausting. The tumor increased rapidly in dimensions, and the

nipple discharged a lacteal fluid. Four months later the unaffected gland began to secrete a similar fluid, although nothing could be detected by touch. The intense pain prevented sleep and impaired appetite, and produced marked failure of flesh and strength. The patient was first seen at this period. I found the tumor hard, movable, exquisitely painful and faintly irregular in contour. The cutaneous surface was not altered in appearance, and not attached. Nipple retracted, exuding the above mentioned fluid in sufficient quantity to soil the garments. Axillary glands free.

Extirpation was advised, and four weeks later effected. I removed the whole gland and adjacent adipose tissue. Patient is now well, enjoys excellent health, and seven months since removal presents no manifestations of return. (Adenomata, when removed without including gland, are prone to return.)

The patient from whom diagrams 8 and 5 are sketched is under the care of Dr. Parrish, who presented the specimen to the Philadelphia Obstetrical Society with the following history. The tumor was referred to me for microscopical examination. Lady, Mrs. Blank, aged 69, mother of several children, first noticed a lump in her breast 31 years ago. It was small and very hard, slightly irregular in contour, free to be moved, and painless. For 30 years it occasioned no trouble, but during the 31st year became painful and began to enlarge. The axillary lymphatic gland also became enlarged and indurated, and subsequently proved troublesome, from nocturnal pain. The skin over the tumor became attached, but no other changes were noticed. Excision was effected, and the results you have before you. No hereditary tendency to carcinoma exists in her family.

Having seen these facts, and being able to verify them by personal observation, to what other conclusion can we arrive than that adenoma of the mammary gland does become carcinomatous? Can the objection be raised that this tumor was always carcinomatous? The whole clinical history of carcinoma, in all its forms, and under all circumstances, stands prominently in opposition, and does not, for one moment, permit of such a supposition. We are forced, then, to conclude that this instance, at least, conclusively demonstrates that it, originally a pure adenoma, has, after many years, become the seat of carcinomatous degeneration, and constituted the point from which the axillary glands, and probably whole system, became secondarily involved.

Mammary adenoma is peculiar in that it affects primarily but a segment of the gland. Its growth is, as a rule, slow, varying from one to thirty years. Exceptionally it may be fully developed in a few months. Its shape and contour closely resemble scirrhus and other forms of carcinoma, and from these conditions offers no means of differentiation. The pain and retraction of nipple occurs in this as in cancer. When adenoma occurs during the child-bearing period a marked moliminal exacerbation of subjective symptoms occurs, which affords a good diagnostic picture. The often detectable pedicle existing between the neoplasm and the gland

proper affords additional evidence of its nature, as well as the secretion of lacteal fluid, even if in nullipara.

The involvement of skin, enlarged vessels and lymphatics, is not seen until carcinomatous change has occurred. Regarding treatment, but little can be said. The tendency to return of the pure neoplasm, which, in its non-cancerous state, occasions severe suffering and may prove fatal, demands removal, not of the tumor alone, but the whole breast. The fact that it may become cancerous more urgently demands a similar course, and that early in its existence.

Remarks.—Dr. L. Brewer Hall believes that carcinoma may afflict any portion of the system, and especially morbid and cicatricial tissues. It may follow a bruise, or even a scratch. Such being the case, it is not impossible for adenoma to become cancerous, yet is it so liable so to do as to warrant operation before manifestations of degeneration occur? If the growth remains stationary, I would be disposed not to interfere and await further developments. The clinical behavior should suggest the treatment, and the histology need not be so thoroughly known in forming plans of treatment. On the whole, I prefer the expectant plan of treatment, which does not incur immediate danger from the operation.

Dr. E. E. Montgomery agrees with the author, that adenoma of the mammary does become carcinomatous, and coincides with the view that extirpation of the mammary gland, in its entirety, should be effected. That the occurrence of a single instance like the case narrated this evening should be possible, is sufficient to determine the employment of radical measures in order to avoid similar catastrophes. Many ladies, when cognizant of a tumor, become morbid and live in constant dread of cancer. Their lives are thus blighted and their usefulness impaired.

The psychical influence must not be overlooked, and should be a factor of considerable attention. The relief of mind following removal of a tumor, and the happiness ensured, should be of sufficient import to alone demand operation.

In closing the discussion, Dr. Beates remarked that it was this spirit of conservatism recommended by Dr. Hall that he especially desired to meet. He does not believe it proper to delay and postpone the only chance of cure until carcinomatous changes have occurred and the patient is constitutionally involved and rendered incurable. The danger of the operation is nothing in comparison to the great and fatal consequences of cancer, and should not be given a thought. The complete understanding of the histology is an essential, and its absence may easily explain the apparent rarity of adenoma. Surely adenoma is not a neoplasm of recent years; it certainly affected the mammary gland as long as woman has existed. That it has not been recognized, and when seen, been associated with various degenerations, or again when marked by preponderating pathological elements and not perceived is attributable to the fact that the histology and morphology has been neglected and not understood. In his limited experience, no less than five instances of oedema, verified by microscopical study, have been met with. He believes that

many tumors of doubtful nature were primarily pure adenoma, which, if they had been removed, would have resulted in complete cure and salvation from malignancy. The proneness to epithelioma or carcinomatous degeneration of the cervix uteri, after the menopause, is a fact widely known. The intimate sympathy existing between the mammary gland and the reproductive system, of which, indeed, it may be considered a part, affords additional cause to infer that such catastrophe might rationally be expected in the neoplasm under consideration, especially as it is already the product of morbid processes. Had this plan of treatment been adopted early in the history of Case No. 3, she would not now be a victim of cancer. With these views he recommends the treatment above set forth.

PHILADELPHIA LARYNGOLOGICAL SOCIETY.

Annual meeting, held at Dr. Chas. Turnbull's, 1702 Chestnut street, on Friday evening, May 26th, 1882.

Dr. J. Solis Cohen in the chair.

Dr. Brose, by invitation, exhibited a case of Ludwig's angina, of which he gave the following history:—

B. R., aged twenty-one years, single, habits temperate, no history of syphilis. Father died at the age of fifty-three years; cause unknown. Mother living, and in good health. Has brothers and sisters, and as far as he knows they are in perfect health. Three weeks ago he caught cold, and then complained of cough, difficulty in swallowing, but had no enlargement of the neck until a week later, when he noticed a swelling on the right side. This was soft, and was seated below the inferior maxilla, extending from the anterior margin of the sterno-mastoid muscle to the median line of the neck, embracing the thyroid gland. There was no tenderness on pressure, nor difficulty in breathing. He consulted a physician, who advised a flaxseed poultice, which being applied, the swelling and accompanying symptoms disappeared. The swelling remained away two days, when the door and windows of his room being left open at night, he again caught

cold. The right side of the neck now became swollen and very hard. He was unable to swallow solids, and complained of dyspnoea. The swelling gradually became smaller but harder, until his admission into the wards of Dr. F. H. Gross, at the German Hospital, May 16th, 1882, when he presented the following symptoms: breathing unobstructed, swallows liquids with some difficulty, but is wholly unable to take solid food. The enlargement on the right side of the neck, a very hard and firm mass, extends from the inferior maxillary, embracing the submaxillary gland, downward, three inches; from the sterno-mastoid muscle behind to the median line of the neck in front, embracing the thyroid gland. There was no pain on pressure, and the local temperature was but little above that of the opposite side. His axillary temperature ranged between 98° and 100° F., being always from 1° to 1° higher in the morning than in the evening. On passing a bougie, an obstruction was encountered at the beginning of the œsophagus.

The treatment has consisted in mercurial inunctions, and the tumor has diminished much in size but retains its hardness.

At present the patient swallows solids without difficulty, and the remains of the swelling consist of a hard mass, situated in front of the sterno-mastoid muscle, at the level of the upper border of the larynx. The patient was discharged cured, June 12th.

Remarks were made upon the case by a number of the members, Dr. Cohen observing that the description seems more as though it was a diffuse inflammation of the connective tissue of the neck, or Ludwig's angina, as in disease of the thyroid body, acute thyroiditis, the tumor would extend below the level of the larynx.

Dr. J. Solis Cohen read a paper on "Rigidities of the Crico-arytenoid Articulation."

The following officers were elected for the ensuing year: President, Prof. Harrison Allen. Secretary, Dr. Geo. Y. McCracken. Executive Committee, Drs. J. Solis Cohen, Chas. Turnbull and Chas. E. Sajous.

On motion, a vote of thanks was tendered to the retiring President.

EDITORIAL DEPARTMENT.

PERISCOPE.

Chronic Cerebral Meningitis.

In the *British Medical Journal*, Dr. A. Hughes Bennett reports the following interesting case: The subject was aged 37, of no occupation. The father of the patient, who was otherwise a healthy man, was said to have had several attacks of temporary paralysis affecting the right leg and both arms. These seizures came on suddenly, and their effects lasted from a few days to several months. Otherwise, the family history was healthy. The patient himself appeared to have enjoyed perfectly robust general health all his life till the

present illness. He was born in Australia, and remained there till a few years ago, engaged in active and healthy pursuits. Since his residence in England, he had passed his time in country and outdoor occupations, and had always been noted for his activity and strength, as well as for his intellectual acumen. At the age of fifteen, on awaking one morning, the patient discovered weakness in one of his arms; this soon passed away. Since then he had been liable to attacks of a similar nature. Being in his usual good health at night, next morning he would find one or more of his limbs on the left side weak. This paresis lasted from a few days to some weeks, and on one occasion as long as six

months. The paralysis was not complete; and, when it affected the leg, did not prevent the patient from walking, but only caused him to be lame, and drag the toes along the ground. When the arm was attacked, it was weak; and there was numbness, especially on the ulnar side. In the intervals between these seizures he was perfectly well, and there was no trace of impaired motion. Even when the paresis was present, he could, as a rule, take a great amount of exercise; but on several occasions, when it was severe, he was completely laid up. He had never had syphilis, or any other cerebral symptoms, and was not aware of having had "fits" or attacks of any kind.

About the middle of September, 1880, the patient, being in his usual good health, was seized with a severe pain in the epigastric region, and with an illness which laid him up in bed for six weeks. It appeared to be confined to a spot about the ensiform cartilage, was increased on pressure and after food, and was modified by position. There was a little vomiting; but no blood was ever seen in the ejected matter. The medical men in attendance believed the affection to be ulcer of the stomach. At the end of six weeks the symptoms passed away; the patient became convalescent; traveled to London; and for the next three weeks, although generally weak, considered he was rapidly improving in every way.

On November 21st the patient was seized with a severe pain in the epigastrium, which again compelled him to apply for medical assistance.

Present Condition.—The patient was very tall, (said to be 6 feet 5 inches in height), of spare yet robust build, pale and somewhat thin, from his recent illness. He complained of a severe, dull, aching pain at the ensiform cartilage. This was not influenced by pressure, but was increased after food, although not to a great extent. There was nothing to be seen or felt locally. There was no vomiting, nor other symptoms. All the organs were healthy; but the patient was slightly feverish, greatly depressed in spirits, and had a look of much anxiety and suffering. This condition continued without change during the next five days, the pain occurring in paroxysms of an extremely severe character, leaving during the intervals a dull, aching sensation. On November 25th the urine was found to be loaded with bile; and on the following day the patient presented all the usual appearances of jaundice. For the following three weeks the condition remained much the same; and there was almost constant pain in the epigastrium, increased frequently by paroxysms of a very acute character. There were also griping pains in the abdomen, especially before and after a stool. The bowels were constipated, and there was well-marked jaundice; no vomiting or headache; no oedema or anasarca; and the appetite was fairly good. The most careful and repeated physical examinations failed to detect anything abnormal. About December 19th all the symptoms gradually began to diminish in severity; abundant bile appeared in the stools; the urine became clear; the yellow color of the skin perceptibly faded; and the epigastric pain was much re-

lieved. The general improvement so advanced, that in a few days the patient became quite convalescent, was able to sit up, and, with the exception of great weakness and emaciation, felt in good health and spirits. This continued until January 1st, when he was suddenly seized with an acute, lancinating pain in his head, accompanied with feverishness and great depression, which lasted during the day, and which was finally relieved by a hypodermic injection of morphia. A few days subsequent to this, a return of his former complaint was observed; namely, paresis of the left leg. The extensors of the foot were paralyzed; and, when the patient walked, he was very lame, and the toes dragged along the ground. The extensors of the thigh were also weak. All the flexor muscles seemed to be normal. The extension of the left hand was somewhat impaired, but otherwise the limb was unaffected. There was no loss of sensibility. With this exception, the general convalescence progressed favorably till January 6th, when the patient stated that he had a "fit." He said he had a repetition of this seizure on the following day. During the succeeding twenty-four hours he had two more attacks, one of which was witnessed by Mr. W. L. Purves (who watched the case with me throughout), and who described it as a genuine epileptiform fit. There were sudden convulsions of all the limbs and face, and complete loss of consciousness, lasting for some minutes. Immediately afterwards the patient was weak and depressed, otherwise well. Next day there was distinct paresis of the right arm, and the face was drawn slightly to the left; no other cerebral symptoms. The paresis of the arm gradually increased till January 12th, when its movements were very feeble and imperfect, and the grasp of the hand was almost lost. The patient then was depressed and emotional, but his intelligence was perfect. There were now slight thickness of speech and hesitation in articulating. On the following day the right arm was absolutely paralyzed as to motion, but the sensibility was unaffected. Two days later the right leg was found weak; there was considerable difficulty in articulation, and the patient spoke in a mumbling way. The movements of the tongue were sluggish; and, when protruded, it was pushed toward the left side. The face was distinctly drawn toward the left. In addition to the difficulty of articulation, there was evidence of partial true aphasia, as the patient had difficulty in selecting and recollecting suitable words with which to express himself; but he never employed wrong ones. His understanding seemed intact. Till January 17th, all these symptoms rapidly increased; when, in addition, he was attacked with severe pain in the back, with cramps and contractions of the legs. The patient was dull and apathetic, but appeared to understand what went on around him. His speech was now unintelligible. All the symptoms increased, and on January 22d the whole of the right side was completely paralyzed. Although the patient could not say a word, he appeared intelligent, and understood what was said to him. On the 28th the patient was evidently becoming weaker, the sphincters began to be relaxed, and the catheter had to be used.

July 22, 1882.]

Periscope.



From this date to February 8th he gradually sank, became comatose, and died.

A post-mortem examination was made, from which it was concluded that the patient, in early life, without apparent cause, was afflicted with chronic cerebral meningitis, which, for many years, caused no symptoms except occasional attacks of temporary hemiplegia. The changes in the tissues and circulation thus induced may have afterwards been the starting-point of the chronic abscess, which existed for a long time, without producing any symptoms. Five months before death the patient was seized with an acute attack of limited peritonitis, involving the portal system, and subsequently causing thrombosis and obstruction of these veins. The constitutional disturbances induced by the second attack of this illness probably excited the recent acute action in the brain, in the shape of cerebro-spinal meningitis, and the extension of the already existing abscess.

Successful Gastrostomy.

In the *Lancet*, Mr. Thomas Bryant records a successful case of gastrostomy, for cancer of the œsophagus. The patient, a male, aged sixty-five, had enjoyed good health up to the winter of 1879-80, when he occasionally suffered from fainting fits, and was greatly troubled with dyspepsia. He grew gradually worse, and finally exploration revealed a stricture at the lower end of the œsophagus. Gastrostomy was determined upon, and the following operation was performed on Dec. 3d, 1881: The bichloride of methylene was used as an anæsthetic, and the carbolic spray was employed. An incision three inches long was made about half an inch below the margin of the left ribs and parallel with them; the skin and muscles were consecutively divided down to the peritoneum; all bleeding vessels were twisted as they were divided, and all capillary oozing was arrested by a wet sponge. The peritoneum was then divided, and the stomach, which presented itself, was at once seized, care being taken at this time to keep the wound well sponged, to prevent anything passing into the peritoneal cavity. The stomach was brought well forward through the wound, by means of two loops of fine carbolized silk, which were inserted through the peritoneal covering of the stomach, about one-third of an inch apart. The ends of these loops were left long, for a purpose to be described later on. The stomach was next carefully fastened, by a series of interrupted silk sutures, to the margins of the wound, the sutures including the parietal peritoneum with the muscles on the one hand and the peritoneal coat of the stomach on the other. The stomach at this stage of the operation was not opened. The wound was dressed with a mixture of one part of terebene and three of olive oil, a half grain morphia suppository was given, and small nutrient enemata of four ounces of milk and beef tea, with ten drops of laudanum, were ordered to be given every four hours. The patient progressed well, and on the eighth day after the primary operation the stomach was opened by making a puncture through its coats with a tenotomy knife, one-eighth of an inch wide, having gently elevated

the exposed surface of the viscus by means of the loops of silk left long for this purpose. All the sutures were removed. A tube the size of a No. 9 catheter was then introduced through the artificial opening into the stomach, and the patient fed with a few ounces of warm milk, none of which escaped on the removal of the tube. He was now fed partly by enema and partly by the introduction of food into the stomach through the artificial opening, the use of the latter being gradually increased day by day. The stomach bore the food well. The routine of feeding by the stomach, three weeks after the last operation, is reported as follows: 9 A. M., milk, one egg and two drachms of brandy; 3 P. M., beef tea, with finely minced pancreas; 9 P. M., milk, egg and brandy; 3 A. M., milk, egg and brandy. On the thirty-sixth day it is noted that he is gaining strength and is able to sit up daily.

January 25th. Mr. H. is now able to come down stairs, but the effort of walking up again causes great fatigue and slight swelling of the legs. The wound is nearly healed and looks dry. The orifice of the artificial opening into the stomach appears as a dimple. There is no difficulty in introducing the tube for feeding purposes. He takes four meals daily very well. Bowels act well. Urine healthy. Bad temper is his only drawback.

March 20th. Three months and a half after the operation, Mr. Stephens reports: "After the operation Mr. H. steadily gained weight until about Feb. 18th, since which time he has been, I fear, going down hill. There is now scarcely a trace of the wound, only the artificial orifice. He is fed regularly every six hours by the tube in his stomach, but takes some new milk daily by the mouth, and milk with coffee or tea occasionally. He is now steadily, but none the less surely, losing ground, and is unable to take as much food as formerly by the stomach."

To-day (April 2d) he reports: "Mr. H. is still getting weaker, though very gradually. Finds more difficulty in taking liquid by the mouth, and experiences pain in the right shoulder-joint at each gulp. The stomach retains food well. Bowels more regular, and motions healthier than they have been for many months. The nutrient suppositories are still of immense value. He remains down stairs daily for eight or nine hours, and gets about in a Bath chair." May 2d: At the present time he is as last reported.

In conclusion. Mr. Bryant says: "Let me summarize what I wrote a year ago when relating a case of gastrostomy for cicatricial stricture, at a sister Society (*vide The Lancet*, April 9th, 1881). That gastrostomy for cancerous stricture of the œsophagus should be undertaken as soon as there is a practical difficulty experienced in the deglutition of solid food, life being prolonged by such a practice, since the progress of the cancerous disease is retarded and much misery is saved. That the operation should always be divided into two steps, as suggested by Mr. Howse, and that the second step should be performed on the fifth, sixth or seventh day after the first, according to the repair in the seat of operation and urgency of the case. That the opening into the

stomach should not be larger than that made by an ordinary tenotomy knife, or about one-eighth of an inch, since such an opening is elastic enough, on the one hand, to admit a tube for feeding purposes, through which thick food can be injected with the feeding apparatus I employ, and on the other to close after the removal of the feeding tube, so as to prevent regurgitation of the stomach's contents, with its attendant evils."

Hypodermic Use of Amyl Nitrite.

Dr. J. J. Frederic Barnes thus writes, in the *British Medical Journal* :—

I have administered amyl nitrite hypodermically thirty or more times during the past eighteen months. In all cases a ten per cent. solution in rectified spirit was used. In no case did any untoward inflammatory or suppurative symptoms occur afterward. The action of the drug was immediate in every case, the subjective phenomena being like those experienced when using the ordinary methods of administration. The spirit solution appears to be an excellent preparation for use, as a small quantity kept in an ordinary stoppered bottle for some months retains its full efficiency at the present time. The dose usually administered has been ten minims of the solution, equal to one minim of amyl nitrite. In lumbago, where the patient is seen at the commencement of the attack, and the disease is not of long standing, the drug given in this manner instantly relieves the symptoms; a patient who is unable, previously to its administration, to bend the trunk without the most exquisite pain, five minutes afterwards can do so quite readily. In a case of paraffin poisoning, where the patient was in a state of collapse and almost pulseless, one administration (inhalation having been ineffectually tried) brought on an immediate resumption of cardiac function, the man speedily recovering. Its action in this case would, I apprehend, be due to the relief momentarily given to the congested centres by the peripheral hyperæmia induced. In another case, one of duodenal colic, the patient was found rolling on the floor, from the acuteness of the pain; when, on injecting fifteen minims of the spirit solution, the pain disappeared as if by magic, and the patient was at once able to resume his ordinary position. The value of this drug by ordinary methods of administration has already abundantly demonstrated how great a boon the discovery of Dr. Lauder Branton is in the hands of the profession, notably in cardiac angina; and I feel confident that its utility may be still further enhanced by giving it, as here recommended, hypodermically.

REVIEWS AND BOOK NOTICES.

NOTES ON CURRENT MEDICAL LITERATURE.

—Another edition of "The Vest Pocket Anatomist," by Dr. C. Henri Leonard, indicates that the popularity of this little manual is una-

bated. It is published by the author, Detroit, Mich.; price 75 cents.

—Dr. John C. Morgan, a respected homœopathic physician of this city, has written a little work on the "Diet of Infants and Young Children." It is a ground on which all "schools" can meet. His opinions are generally sound, except that he gives too indiscriminate praise to the various "prepared foods," and in some of his recommendations, as giving new cider to young children, he is too liberal. (James Hogan, Phila.; price 25 cents).

—Dr. Radcliffe, of Washington, in a paper on the treatment of uterine fibroids with iodine, gives an ample bibliography, and states his own results as follows: "I have learned this much from treating quite a number of cases—cases probably in the incipient stage, and due probably to simple hyperplasia or proliferation of tissue—that by iodine the hemorrhagic status is changed, the menstrual periods prolonged or made regular, their approach and attack shortened, and the interval made more comfortable."

—"Iodoform gegen Diabetes Mellitus," is the title of an important contribution to therapeutics, by Prof. J. Moleschott, of Rome. He details five cases in which iodoform very positively benefited in this serious disease. To prevent the unpleasant eructations he combined it with cumarin. His usual formula was—

R. Iodoformi,	1.0
Ext. lactuc. sat.,	1.0
Cumarini,	0.1.

For twenty pills; powder with gum arabic and take from one pill twice daily to two pills four times daily, gradually increasing. Cumarin, it will be remembered, is the odoriferous principle of the tonka bean.

—The Alumni Association of the Albany Medical College has published the Proceedings of their Ninth Annual Meeting. President Vanderveer delivered the address, and made an earnest plea for the moral improvement of the profession. He most justly says :—

"Medical colleges cannot do all that is needed at the present time to improve the condition and standing of what we so love to mention as one of the three learned professions. They are making some effort in various directions, but the facilities and inducements in some portions of the country to organize new schools are such as to cripple seriously the good that is being done. I am sure that all the quackery exercised in the present day does not do as much harm to the practice of medicine as do the self-advertising, immoral and unworthy men in our ranks."

A number of prizes are offered for competition, to the alumni of the college.

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SURGICAL PROVISIONS ON RAILROADS.

We had just sent to press the remarks we lately made on the propriety of railroad companies providing the most immediate necessities in case of accidents, when we received a printed circular from the Denver and Rio Grande railway company, describing its "Train Medicine Chest."

This chest, with the printed instructions, is supplied to every passenger train. Its contents are as follows: Laudanum, ammonia mixture, styptic collodion, bicarbonate of soda, styptic cotton, surgical needles, silk, wax, sponges, adhesive plaster, bandages, lint, scissors.

The printed circular contains directions for the use of these in case of accidents, and also for the immediate treatment of emergencies such as are likely to occur. These include bleeding wounds, fractures, dislocations, burns and scalds, frostbite, rupture, fainting, shock, etc. The advice is presented in plain terms, with the utmost brevity consistent with clearness.

This line has also organized a regular staff of surgeons whose duty it is to respond at once to every call upon them from the employees of the road. The circular says:—

"Whenever an accident occurs on the line, the conductor must immediately telegraph the surgeon in whose charge the injured person is to be placed, in order that time may be given to prepare for reception of the patient.

"In case of injury inflicted by trains upon intoxicated persons on the track, tramps stealing a ride, etc., where the employees of the road are in no way to blame, the injured person must, of course, be carried to a station where humane and proper treatment can be bestowed; but, as such persons are generally without means, it is not advisable to take them out of the county in which the accident occurs, for, if removed beyond the county limits, the company may be held responsible for treatment and support."

We believe the preparation and distribution of this circular, and the organization of the staff, are due to the skill and energy of F. J. Bancroft, senior surgeon of the road, who deserves much credit for the measure.

It is one which ought to be extensively adopted throughout our country. The traveling public should be protected in regard to their health and safety in every possible way. This is little enough to ask of these corporations, which in turn are always asking so much of the public.

PRESCRIBING BY DRUGGISTS.

This much mooted question is still an open and undetermined one. But recently a death occurred in England from a supposed blundering prescription of a druggist, which gives fresh interest to the subject, and causes us to think a few words not out of place. In this case the coroner held that the responsibility of the druggist did not cease when he had wisely prescribed a drug that would not kill, but that the question then arose whether one more competent, whether a skillful physician, might not have ordered such medicine as would have effected a cure. There are two sides to every question, and it is but just that they should both be stated. It is a very prevalent notion among the public, not confined to the ignorant, but participated in, to a great extent, by the intelligent classes, that a druggist has a medical education. It is a very common thing

to hear him addressed as Doctor. Because he deals in and dispenses drugs, the public, without stopping to consider, hastily conclude that he is acquainted with all their properties and uses, and to a certain extent this idea is correct. But they fail to realize, because they have never been told, that the successful practitioner of medicine must know more than this. The art of diagnosis they know not of, neither does the druggist, and here comes in the fatal danger of "prescribing by druggists." One could hardly expect the ordinary druggist, when a man enters his store and asks for something for a sick stomach, or a sick headache, or a toothache, earache or constipation, to refuse to prescribe, since he would lose a sale of his wares by so doing. And in these trivial cases, likely enough, any intelligent druggist is fully capable of prescribing correctly. But where will the dividing line be drawn. We all know that some of the most serious and fatal diseases at times present but insignificant outward or ordinarily appreciable symptoms. In this fact we find the argument against "prescribing by druggists." "We must ever bear in mind the fact noticed by the English coroner, that through ignorance of the true nature of the malady afflicting the individual, death may be allowed to ensue, on account of the inappropriateness of the remedy prescribed. Even conscientious druggists fail to realize this aspect of the question. Again, there is another danger. We are all human and are all liable to err. Supposing a man enters a drug store, and complaining of diarrhoea, asks for a remedy. It may happen that the druggist is very busy, or his mind may be pre-occupied in some other way, and he may therefore thoughtlessly prepare a mixture containing fatal doses of opium. Doctors are liable to make the same error, it is true, but the prescription passing through the hands of the druggist, the overdose is likely to be detected; it is hardly possible that two men will allow the error to pass unnoticed. Still, again, it is impossible to say that intelligent and capable druggists may prescribe in trivial cases, for who is to decide of the capability and intelligence of the man. This free-

dom of prescribing by druggists, which is, at least tacitly, recognized in our country, opens the door to untold evils. The majority of druggists are men of very little education outside of their regular business, and when they undertake so important a duty as prescribing for the sick, they are all the time in danger of some fatal error. It has been said that "*any fool can find fault, but that it takes a wise man to find a remedy.*" We confess that it is somewhat difficult to find a remedy for this evil. We can see such only in legislation. In theory it is believed and universally admitted that it is the duty of the physician to ascertain the nature of the malady from which his patient is suffering, and to prescribe the remedy, and that it is the duty of the druggist to compound such prescription. This is the theory, and it is plain enough; if carried out in practice all would be well. If now it were made a punishable offence for any druggist to prescribe, the end desired might be accomplished.

FREE DISPENSARIES AND YOUNG PHYSICIANS.

Charity covereth a multitude of sins, we are told, and it is truly a virtue that deserves great encouragement. But we can go too far in any good work, and it has now become a question for the attentive consideration of philanthropists, whether we have not in our large centres of population ample accommodation for the charitable and gratuitous medical treatment of our indigent citizens. It is a fact, and it is a shame, that many well-to-do persons, for one reason or another, and usually because of a miserly disposition, will resort to hospitals and dispensaries for free treatment, when they are amply able to liberally reward a physician for his services. We know of one case, where a woman afflicted with an ovarian tumor desired to be operated upon by a certain surgeon. He advised her to take a room in the hospital with the surgical staff of which he was connected. This lady's husband was sufficiently wealthy to enable him, before the operation, to give \$15,000 in charity, and to pay some twenty or twenty-five

dollars a week board for his wife. The operation was performed, and the surgeon was compelled, in person, to dress the wound twice daily. He sent in a bill for five hundred dollars, which was refused him, on the technical ground that because he was a member of the staff (from which he received no remuneration), he had no right to charge any inmate of the house, even though, as in this case, the person in question was a *private* patient, sent to the hospital for good nursing. The authorities of the hospital supported the patient, and dismissed the surgeon from the staff. We are glad, however, to say that the courts of law took a more just view of the case, and gave the Doctor a verdict for his bill. It is only natural for persons to prefer going to a first-class hospital where they can receive for *nothing* the opinion and advice of the very leaders of the profession, rather than to seek some young, well informed, but obscure physician, and *pay* him for his services. In some places the old and great men of the profession are very high priced. None but the very wealthy can afford to enjoy their services for more than a mere consultation; while in other localities we find the leaders doing professional work as cheaply as the most recent graduate.

It is these two points that make the pathway of the young physician so hard and rugged. We would say to any young doctor casting about him where to locate, look for a place where free hospitals and dispensaries are very scarce; then inquire about the prices charged by the leaders; if they are very high you can settle down with a fair prospect of success, providing you take with you the two personal elements necessary to success in our profession, viz.: a good moral character and a thorough medical education.

NOTES AND COMMENTS.

Strangulated Inguinal Hernia.

In the *Med. Press*, Mr. Norton relates the following case of a man, an old soldier, aged 59, who had had an inguinal hernia on the right side for thirty years. The rupture had given him much trouble at times, but the patient had always succeeded in reducing it himself.

On the 21st of December, 1881, the rupture came down while the patient was laughing, and he found himself unable to return it, after using a good deal of force.

On admission to the hospital the patient had much pain about the abdomen and was vomiting stercoraceous matter. The tumor was about the size of an orange and very tense. The man was put under ether, and the rupture not yielding to gentle taxis, an operation was performed in the usual manner. On the sac being opened, the cyst was found of a dark purple color, with abrasion of the peritoneal surface. After the constriction had been divided and the gut was being gently returned, it suddenly burst at the seat of abrasion, the contents of the intestine flowing over the wound. After the constriction had been more freely divided, the edges of the gut were stitched to the skin by silver wire. The patient vomited much during the operation, and immediately afterwards. On being put to bed a poultice was applied over the wound, and one-quarter grain opium given every hour, with teaspoonfuls of brandy and milk and soda water.

On the 22d patient was very prostrated, having vomited severely during the night, and complained of a good deal of abdominal pain. Pulse at 11 A. M. 135, and very weak.

On the 23d the vomiting continued at intervals, but not so severely, pulse being 120, stronger, and the abdominal pain much less, very little fecal matter at present coming from the wound.

On the 24th the vomiting still continued somewhat, but the abdominal tenderness had gone, and patient was able to take iced milk, and soda water and beef jelly fairly well.

On the 30th the man was quite free from all symptoms of vomiting, the wound was looking healthy, and a large quantity of liquid matter coming away.

On the 2d January, 1882, a soft pad, kept in place by an india-rubber bandage, was applied over the wound to prevent the discharge from constantly trickling over him and causing skin irritation. At this time the patient was eating and sleeping well.

On the 19th January, the intestinal flow having stopped for twelve hours, the patient was seized with severe vomiting, and brought up about a pint of stercoraceous matter; an india rubber tube was then with difficulty inserted, and a large quantity of liquid matter drawn off; this gave him instant relief. From this time a tube was passed twice daily and left in two or three hours, its passage being attended with some diffi-

culty, owing to the gut shifting its position. The patient went on in this way till the 18th of February, now and then sitting up in a chair with his pad on.

On February 19th vomiting began again severely, nothing flowing through the tube for some hours. After the bowel had been well relieved by the tube, the vomiting still continued incessantly, and the patient died of exhaustion on the 21st of February, two months after the operation.

Post-mortem.—On removing intestines the obstruction was found about a yard and a half from the ileo-cæcal valve; above this the gut, when distended with water, was two inches in diameter; below the stricture the diameter was about half an inch. About six inches above the valve was another doubling of intestine, which was fixed by adhesions. Water passed freely through this part, although the bowel was dilated above it. The duodenum and jejunum were otherwise normal. The cæcum contained several hard scybala.

Differential Staining of Nucleated Blood Corpuscles.

In the *Microscope*, Dr. Allen Y. Moore says that it has been urged against the differential staining of histological structures, that the process may induce an alteration which may be mistaken for the normal condition. That this is, in many cases, true, is beyond question, but the exceptions are far too numerous to justify it as a rule.

For some years past he has used a process for the double staining of nucleated blood corpuscles, which causes no alteration, except of course in color, and as the structure can be seen much better in a semi-transparent than in a more perfectly transparent body, the corpuscles thus stained offer advantages for study which are not found in those left unstained.

The fluids used for this purpose are two, which he designates as A and B. Their formulas are as follows:—

A.

R. Eosin	gr. v
Distilled water,	3 iv
Alcohol,	3 iv.

Sig.—Dissolve the eosin in the water and add the alcohol.

B.

R. Methyl analin green,	gr. v
Distilled water,	3 j.

The blood should be spread upon the slide, by placing a drop upon one end and quickly drawing the smooth edge of another slide over it. This, if well done, will leave a single layer of

corpuscles evenly spread over the central part of the slide.

When the corpuscles on the slide are thoroughly dry, which will only require a few minutes, the slide should be "flooded" with stain A.

This should be allowed to remain on for about three minutes, at the end of which time it may be washed by gently waving back and forth in a glass of clean water. Before it is allowed to dry, the corpuscles should be again flooded, this time with stain B. After two minutes' exposure to this fluid the slide should be washed, as before, and set away to dry. When dry, a drop of Canada balsam may be put upon the blood, a cover-glass applied, and the whole gently warmed until the balsam spreads out properly. When hard, it may be finished the same as is usual with balsam mounts.

If now examined with the microscope, the corpuscles will be found to be well stained with red, while the nuclei and "leucocytes" will be a blueish-green.

The granular appearance which is ordinarily seen in the nuclei now shows with a vigor and sharpness which is difficult of description, while the whole corpuscle is as brilliant as a newly-cut ruby.

Boracic Acid for Granular Lids.

Dr. James L. Minor says (*Va. Med. Monthly*) that he has found boracic acid powder a most excellent application to granular lids. It is used as follows: The lids being thoroughly everted, the powder is spread freely over the whole conjunctival surface with a camel's hair brush. The acid is generously applied, and mixing with the discharge from the lids, it readily gains access to the cracks and crevices between the granulations, and thus comes into direct contact with the entire surface upon which it is intended to act. The immediate effect is to increase lachrymation and to cause a burning, gritty, sensation, with some pain. These symptoms usually pass off within ten minutes, and are followed by an amelioration of all the symptoms which existed before the application of the acid. The granulations may look less gorged and prominent, but he has not been able to discover much change in the naked eye appearance of the conjunctiva after one application. The powder was used three times a week. The improvement is so gradual that it is almost imperceptible as it progresses, but Dr. Minor has derived more satisfactory results from the use of this powder than from the ordinary caustic or astringent applications.

Fracture of Thyroid Cartilage

Mr. Reginald Harrison reports the following case in the *Lancet* :—

J. W. B—, aged sixty-three, a dock laborer, was admitted on March 28th, 1882. A few hours previously he had been kicked on the throat, upon which swelling and difficulty in breathing rapidly supervened. On examination, there was considerable swelling over the front and sides of the larynx. As the difficulty in breathing was rapidly increasing, Mr. Harrison advised that tracheotomy should be performed without delay, it being probable that the symptoms were due to a fracture of the thyroid. Mr. Harrison's house-surgeon, Mr. Rayner, accordingly, at once opened the trachea and put in a tube, at the same time verifying the diagnosis that had been arrived at. The patient, after the operation, was kept in an atmosphere well charged with steam, and for four days was fed by the rectum, after which he was able to take liquid food by the mouth. The tube was removed on April 8th. The wound rapidly closed, and the patient left the Infirmary on April 25th, some slight huskiness in the voice alone remaining. Mr. Harrison commented upon the extreme rarity of such injuries. Tracheotomy had undoubtedly saved the patient's life. The age of the patient had probably induced changes in the cartilage, which had somewhat added to its liability to fracture on the application to it of force, such as a kick.

Uræmic Convulsions and Coma Treated with Chloroform and Salicylate of Soda.

Dr. Thomas A. J. Cocksedge reports the following case in the *Lancet* :—

On the 28th of April I received an urgent message to attend the Rev. C. M. He had been under my charge for some weeks, as he was suffering from chronic desquamative nephritis, complicated with asthma. His kidney disease is, I believe, of nine years' standing. I found him semi-comatose, and during the day he gradually lapsed into a condition of profound coma. Convulsions came on about 1 P.M.; they occurred at first at intervals of about one hour, and as the day wore on, although less violent, with intervals of about twenty minutes. His last convulsion took place about midnight. He was seen by Mr. Martin Coates, of Salisbury, with me, about 11 P.M. He was then perfectly comatose, the pupils being quite insensitive to light. Mr. Coates considered him to be in a desperate condition, and I confess that I quite agreed with the prognosis. However, on visiting him again, after Mr. Coates left, I

found the convulsions so much less violent that I became more hopeful. The next day there had been no recurrence of the spasms, and he steadily progressed toward recovery. The treatment of the case was as follows: Mustard and water were applied to the feet. Turpentine enemata were injected into the rectum. Podophyllin and jalapine were given by the mouth, being introduced through a quill. The surface of the body was sponged over with vinegar and water, and profuse diaphoresis was thus induced. Chloroform was administered by inhalation, during two of the severest spasms. On the second occasion, however, I noticed that respiration was with such difficulty reestablished, that I did not venture on a third administration of this remedy. Before leaving, on the morning of the 29th, I gave him an enema, almost as hot as I could bear my finger in, of very weak mutton broth, this being the first food which he had taken since his evening meal of the 27th. On the 29th, as soon as he was able to swallow, I gave him seven and a half grain doses of salicylate of soda, in weak milk and water, every six hours.

Painful Affection of the Wrist.

In the July number of the *New York Medical Journal and Obstetrical Review*, Dr. Edward H. Bradford, Surgeon to Out Patients, Boston City Hospital, relates three cases of a painful affection of the wrist, the features of which were: pain referred to or most severe at the middle of the carpus; slight swelling; an absence of constitutional disturbance, and with no interference, or but partial interference, with motion of the articulation between the carpus and the radius and ulna. The symptoms were relieved by fixation, and recovery took place, finally, after a period of rest. The author considers them examples of synovitis of the carpus.

The Ergotine Treatment of Uterine Tumors.

In the July number of the *New York Medical Journal and Obstetrical Review*, Dr. Wm. T. Lusk, Professor of Obstetrics in Bellevue Hospital Medical College, relates a case of fibromyoma of the uterus, in which ergotine injections into the subcutaneous tissue of the abdominal wall over the tumor, not into the tumor, resulted in a rapid diminution in the bulk of the growth, at the expense, however, of gangrene of the compressed tumor, ending in fatal septicæmia. While some few cases of recovery by use of these injections are on record, they cannot be said to have gained the confidence of gynecologists.

Morphia Hypodermically as an Adjuvant to Chloroform.

Dr. Andrew S. Currie, in the *Lancet*, calls attention to a paper on this subject in the *Practitioner*, by Dr. Alexander Crombie, which he considers has not received enough attention. Dr. Crombie states that in 600 cases, in only one was there any evidence of asphyxia, and in that instance the usual precautions had been neglected. The method employed is very simple, and consists in the hypodermic injection of morphia immediately after beginning the administration of chloroform. I have recently employed a modification of this plan with the greatest comfort to the patient and to myself. About ten minutes before administering the chloroform I inject a full dose of the liq. morphiæ hypod. (B. P.). The chloroform is freely sprinkled on a piece of lint folded twice, and one dose is, as a rule, sufficient to induce complete anæsthesia.

Dr. Currie says that having, a day or two ago, to open a large abscess of the thigh, in the case of a lady who has been an invalid for the last ten or twelve months, I induced anæsthesia easily and rapidly in this way. The patient, who has repeatedly had chloroform administered for confinement, tooth extraction, etc., assured me that she had never before taken it with such a total absence of all feeling of discomfort. There was no sensation of suffocation and no trouble with after-sickness, which had on previous occasions proved troublesome.

Codeia in Diabetes.

In the *British Medical Journal*, Dr. R. Shingleton Smith relates some cases of diabetes treated by codeia, in which this drug produced very good effects. It has a remarkable power of checking the elimination of sugar, and a corresponding improvement in the health of the patient results. It would appear that alkalies and all other methods of treatment are far inferior to the treatment by codeia, which may be considered to have almost a specific action on the disease. The facts seem to justify decided language with regard to the use of codeia, which should not be permissive, but imperative, in all cases of advanced diabetes mellitus; whatever else may be given, codeia should first be given, and in fairly large doses, until some physiological effect is produced. Even dieting appears to sink into insignificance, alongside of codeia, and in one case this drug alone was sufficient without any dieting, the patient being on a mixed diet all the time. In all the cases reported there was marked improvement while taking the

codeia, which ceased when it was withheld, and was renewed on its repetition. Morphia had a good effect in two cases, but the improvement with it was much less marked than with the other alkaloid.

Treatment of Scars of the Face.

A most important branch of cosmetic surgery is treated by Dr. C. L. Bull, of New York, in a reprint from the *Transactions of the Ophthalmological Society*. He says: "Persistent rubbing and kneading of scars of the face, both those due to burns and those resulting from bone caries, as preparatory to blepharoplasty, have, in a number of instances in the writer's experience, yielded most excellent results. Adhesions of scars, slight or extensive, to the subjacent parts, have been slowly, cautiously and painlessly detached, and a gradual absorption of the firm material in the dense part of the scar has been brought about. So considerable has been the result obtained in some cases that the writer has come to regard this gradual extension and loosening as an important part of the treatment in these cases." When one reflects on the amount of mental misery these scars often cause, their removal becomes an object of great importance.

Nitrate of Lead in Cancer of the Cervix Uteri.

M. Cheron, in the *Revue des Maladies des Femmes*, says that he has had very good results from the direct application of the nitrate, powdered, to the ulcerated cervix. After touching the ulcerated surface with glycerine, he injects about a quart of cold water, containing about a drachm and a half of tr. ferri perchlorid., and then dries the surface with absorbent cotton. Finally, the following powder is introduced, by means of a syringe made for injecting powders:—

R. Plumbi nitrat., pulv., $\frac{3}{4}$ ss
Lycopod., pulv., $\frac{3}{4}$ j. M.

The powder is retained in place by a tampon of cotton. Through this means suppuration diminishes considerably, as also the bad odor. Even hemorrhage is not so profuse, and in some cases it is entirely suppressed.

Hydrobromic Acid.

Dr. W. B. Moir says, in the *Lancet*, that he has obtained some excellent results from the use of this acid. A young lady complaining of severe and frequent headaches, accompanied with flushing of the face, and at times with ringing in the ears, was encountered. She seemed

perfectly healthy, and there was no appreciable cause for this condition. She was ordered fifteen minims of the acid, thrice daily, after meals, in a little sweetened water. This treatment was continued for three weeks (the dose being increased first to twenty and subsequently to twenty-five minims). The happiest possible results ensued, and complete relief was afforded. Given in combination with quinine, he has found it to mitigate or entirely prevent the headache which often accompanies the use of that drug. In a case of persistent toothache, occurring during pregnancy, he obtained very satisfactory results from the use of this acid.

SPECIAL REPORTS.

NO. VII.—HEART DISEASES.

MALIGNANT ULCERATIVE ENDOCARDITIS.

In the *Medical Times and Gazette* Dr. Sidney Coupland records several cases of heart disease to which he prefixes the term *malignant* to denote simply the clinical fact of their fatal progressive course, without reference to their etiology. In two of the cases reported there was a previous history of rheumatism, while in a third there was no certainty but a probability of such history. He calls particular attention to the irregular and pyæmic character of the pyrexia, which in one case was so strikingly periodic as to closely resemble intermittent fever. He believes that the combination of endocarditis with such a form of pyrexia is enough to justify the gravest prognosis, and to stamp the heart lesion as "*malignant*." The cases recorded are all so similar in clinical history that the symptoms of one will serve to describe all. A man, forty-one years of age, had enjoyed good health all his life, with the single exception of an attack of gonorrhœa twenty years ago. Two months before admission to the hospital he took cold and was seized with pain in the left leg. The pain finally left him, but he seems not to have felt well, and five weeks before admission began to suffer from shivering fits. These attacks would come on at irregular intervals, sometimes every third day and sometimes every fifteen hours, so that he imagined he had the ague. Each attack was accompanied with vomiting, sometimes of food, sometimes of clear or bile-stained mucus, and was followed by an intense thirst and an intolerable sense of heat and discomfort. He was troubled with insomnia, lost his appetite and became very weak. He had no pain, but on December 31st, 1881, he noticed that his legs

swelled a little toward night. He was admitted into the hospital January 3d, 1882, in the following condition: He was spare and sallow, face marked with acne rosacea. Much depressed and had a spell of shivering. Temperature 101.2°, hot and very thirsty. Not sweating. Tongue dry, glazed, cracked, but not coated. Physical signs of lungs practically normal. Cardiac dullness normal. Apex beat in fifth interspace one inch and a half below and half an inch to the sternal side. There is a rough systolic bruit at the apex; no thrill. The pulmonary second sound is ringing; the aortic is dull. Area of hepatic dullness normal, splenic increased, reaching from seventh to eleventh rib. Abdomen full and tympanitic. The temperature being the most marked and characteristic symptom, it was at first supposed that the man was suffering from ague, and quinine was administered freely, but had no effect whatsoever. The existence of the endocardial murmur and the great constitutional disturbance led to the diagnosis of malignant endocarditis of pyæmic type, which opinion was strengthened by the appearance of albumen, and later on of blood, in the urine. The following is the temperature record:—

January 4th. 2.30 A.M., 99°; 4 A.M., 102.8°; 8 A.M., 104°; 5 P.M., 99.8°; 5.20 P.M., 99.4°; 6.35 P.M., 103.6°; 10.15 P.M., 105.8°.

January 5th. 11.30 A.M., 100.2°; 12.20 P.M., 102.4°; 1.40 P.M., 104.2°; 4.45 P.M., 105.2°.

January 6th. 3.30 A.M., 98.6°; 5 A.M., 104°; 8 A.M., 105.2°; 9 P.M., 99°; 10.15 P.M., 103.6°.

January 7th. 2.15 A.M., 105°; 1 P.M., 97.8°; 2.30 P.M., 103.6°; 6.30 P.M., 105.2°.

January 8th. 5.30 A.M., 100°; 6.45 A.M., 103.6°; 10.45 A.M., 105.2°; 9.15 P.M., 98.40°; 9.30 P.M., 99.2°; 10.45 P.M., 103°.

January 9th. 2 A.M., 104.4°; 11.45 A.M., 99.2°; 1.30 P.M., 104.4°; 4 P.M., 104.4°.

January 10th. 1 A.M., 99.2°; 2.45 A.M., 100°; 4 A.M., 103.8°; 7 A.M., 103.8°; 3 P.M., 100°; 5.10 P.M., 103.4°.

January 11th. 5 A.M., 99.4°.

This is truly a curious temperature record, and one that would cause any physician to administer quinine, unless he bears in mind the present recorded cases. The pyrexial period, throughout the disease, averaged about five hours and a quarter. The patient grew gradually worse, the breathing became shallow and rapid, and death occurred rather suddenly on the afternoon of the 11th.

In one of the cases, shortly before death, the temperature fell to 95°. As a rule, ulcerative endocarditis is an acute disease, engrafted

upon already diseased valves, but exceptions to this rule are recorded. The natural tendency of endocarditis, from whatever cause, is to the formation of fibrinous deposits on the inflamed and altered tissue of the valves. These vegetations may and often do excite, by their friction against the walls of the heart or opposite valves, localized patches of inflammation proceeding to ulceration. In that way, cardiac aneurisms and aneurism of the aortic or mitral valve may be set up.

In the *Transactions of the Pathological Society* for 1876, page 73, Dr. Coupland recorded a case where a mitral aneurism originated from the friction of aortic vegetations. Several similar cases have been reported by Drs. Ogle, Moxon, Fagge, and Legg. Vegetating endocarditis may be *simple*, it may lead to embolism and to secondary ulceration, without presenting the clinical features of *malignant* or ulcerative endocarditis. Hence the term "ulcerative," as applied solely to these *malignant* forms, those in which the clinical history is rather that of septic fever than of heart disease, is misleading. For this reason, the term *malignant*, as originally employed by Virchow, has been used to distinguish these septic cases. There must be some element superadded to ordinary ulcerative endocarditis to impress upon it these peculiar clinical features of malignancy. That element has been discovered by Heiberg, and confirmed by Klebs, Osler, (*Seguin's Archives*, February, 1881, page 44), and others, in the presence of fungoid organisms in these vegetations. The clinical distinction has long been known, and the term *septic endocarditis* was in use long before the phrase *mycotic endocarditis* came into being. Jaccoud, in the "Dictionnaire de Medecine et Chirurgie," Vol. xii, 1870, clearly discriminates between vegetating endocarditis and *septic* endocarditis. Quite lately Dr. Goodheart directed the attention of the Pathological Society to the fact that cases of vegetating endocarditis are prone to occur whenever septic disease is prevalent. In what manner the valves of the heart become the seat of this mycosis, it is impossible, with our present knowledge, to state positively, though many theories have been advanced. It must be remembered that the cardiac lesion may be the result and not the cause of the blood contamination. Once formed, however, the diseased vegetations become the foci for the metastatic dissemination of the septic organisms. Given, then, signs of endocarditis, with the above pyrexial type, and constitutional symptoms of a typhoid character, and there can be no doubt of

the nature of the case, and of the lethal prognosis that must be made in the presence of such indications. Unfortunately, no mention is made of treatment, but in one case where uræmia seemed imminent, diuretics warded off the fatal termination for a time. It would seem, if the theory is true, of the parasitic nature of the disease, that antiseptics would, probably, have a good influence, though that question is yet undecided.

In the *British Medical Journal*, Dr. Samuel Wilks, writing about Ulcerative Endocarditis, says: "It is a disease full of interest and importance, for not only is its pathology obscure, but the symptoms are so often illy defined, that it is constantly mistaken for other complaints, and especially for the various forms of fever. The patient is generally in a highly pyretic state, or in that condition which is ordinarily styled typhoid, without presenting any characteristic symptoms, the only sign present to raise a suspicion of the true nature of the case being a cardiac bruit. The case is really one of blood poisoning or septicæmia, the source of the infection being, as it is supposed, in the heart, or in any place near the centre of circulation where ulceration and vegetations exist; but whether the septic material be decomposed fibrin, or the *debris* arising from the breach on the endocardium, or whether there be any distinct infectious substance circulating through the system, is still a question. For some years past it has been known that persons have died with symptoms of typhoid fever or pyæmia, and the necropsy has revealed the presence of fibrinous masses, or infarcts, in the spleen and kidneys, and that associated with these deposits there have been vegetations on the heart, usually of recent formation and situated on chronically diseased valves. Owing to the fact of one organ being especially selected for the manifestation of the infection, the inflammation attending it may be regarded as primary, and the real nature of the complaint overlooked. It is probable that in former years this mistake was constantly occurring. In one of my cases, probably owing to a plugging of some of the cerebral vessels, a meningitis was set up. In another case, the patient had empyema, and which, in spite of being treated by the best methods, seemed to be the cause of death; the autopsy, however, revealed an ulcerative endocarditis. When the symptoms are those only of blood poisoning, they are not always of the acute kind, but may continue over a course of several weeks and then put on the appearance of an intermittent fever. Again, a

patient suffering from known heart disease is attacked by febrile symptoms, pains in the joints, etc., and ultimately recovers. The case is regarded as one of subacute rheumatism, but it is truly one of blood poisoning, and the proof lies in the condition of the organs found after death. In the spleen and kidneys may be found infarcts of different ages, some recent, others drying up, and on the surface of the organs indentations and cicatrices indicative of the presence of much older deposits."

HYPERTROPHY OF THE HEART.

Dr. Samuel West recently exhibited to the Pathological Society, of London (*Lancet*), an hypertrophied heart from an ostler, aged 41, with the following rather peculiar history. He was well until three months before admission to the hospital. He then suffered from dyspnoea, pain and palpitation. The heart was found very large, no murmur, the arteries were hard, the lungs were emphysematous, and there was a small amount of albumen in the urine. Chronic Bright's disease was diagnosed. He became unconscious and died. At the autopsy the kidneys were congested, but otherwise healthy, no sclerosis. The heart weighed twenty ounces, was very large, slightly fatty, no disease of valves, and no cause of the hypertrophy, which was limited to the left ventricle, was found. It was, therefore, a case of cardiac hypertrophy without any of the usual causes being present. It also demonstrated how such a heart may break down without obvious reason. It was suggested that the coronary arteries did not increase in size in proportion to the increase in size of the heart, and so a point was reached where the blood supply was deficient and fatty degeneration ensued.

(To be Continued.)

CORRESPONDENCE.

Medical Status in Cleveland, O.

ED. MED. AND SURG. REPORTER:—

Knowing that your readers are aware that the next session of the American Medical Association will be held in Cleveland, your correspondent thought you might not be averse to a letter from this point about the Profession, the Colleges and the Medical Institutions of this city.

At the present time such a task is an easy one. In fact, the prevailing subject of conversation and the greatest item of local interest is medical Colleges, Medical Graduates, and Professional Training. This subject has received impetus from the fact that two of the leading universities of Ohio—the University of Wooster and the Western Reserve University—have medical departments here, between which a peculiar con-

trovery is waged. About a year since an effort was made to unite these two medical schools, and effect such a conjunction of their otherwise conflicting interests as would make one very large, well-supported institution, devoted to medical teaching. It is said that the two faculties met and selected a new corps of teachers—one-half from each school—and entered upon their new programme with well grounded hopes of success. At first it seemed as if the consolidation would be approved by everybody, but opposition sprang up in an unexpected quarter; the Trustees of the University of Wooster, to the surprise of every one, announced most emphatically that at no time had they even contemplated the discontinuance of their medical school; that they had never authorized any action that could be construed as favoring such a step; and concluded by ordering the professors who had gone into the consolidation to return to their old position and resume their former duties. The professors, not putting in an appearance before the day set for opening the next session, the Trustees vacated their chairs and postponed the winter session of 1881-2 until the spring of 1882. This delay gave the Trustees time to organize the Faculty. Professors Firestone, Miller, Pomerene, Strong and Foote, of the former Faculty, remained. To this number the Trustees added Drs. F. J. Weed, J. E. Burns, T. A. Weed, Charles Arms, and L. B. Tuckerman, of Cleveland, and Dr. George Mitchell, of Mansfield. They also secured the services of Professor Xenophon C. Scott, formerly connected with the other College, who took the chair of Ophthalmology and Otology. Professors Reuben A. Vance and George Hunert, of Cincinnati, O., resigned their positions—the former in the Cincinnati College of Medicine and Surgery, the latter in Miami College—to take the chairs tendered them. Dr. Vance succeeded Dr. Gustav C. E. Weber as Professor of Operative Surgery and Clinical Surgery; Dr. Hunert took the chair formerly held by Dr. W. J. Scott—that of the Principles and Practice of Medicine and Clinical Medicine. The new Faculty sustained a heavy loss in the sudden death of Professor Joel Pomerene, an amiable and highly intelligent gentleman, whose early demise was mourned by a large circle of friends. The faculty, thus organized, began work the first week in March. Despite all the obstacles they had to contend against, the session was a successful one. The class numbered over forty. The graduating class embraced just twenty aspirants for a degree. The final examinations were written and continued through a whole week. A great outcry was raised so soon as the first day's questions were made public. It was claimed that the questions were unusually hard and that the examinations were unnecessarily severe. The excitement reached its highest pitch the beginning of the second week, when the Censors and Faculty reviewed the examination papers and announced that of the twenty would-be doctors seven had failed to attain the standard of proficiency established by the Trustees, Faculty and Censors. At the Commencement, Monday evening, July 3d, the Vice-Dean (Dr. Vance) announced that the position taken by the Faculty was one the medi-

cal profession had long been demanding; it was not assumed in fear and trembling, for the Faculty were so situated that the mere number of students they had in attendance was a minor consideration; and that it would be adhered to under all circumstances, for they were sure that there were enough earnest and sincere men in the profession standing ready to encourage such a departure in medical training to justify them in the step they were taking. The supporters and friends of the other college are divided in their views as to what the consequences will be. A number of them have no hesitation in saying that they think Wooster University has gone too far; that no medical college can be supported by its fees and make such demands of its students. To these gentlemen the outlook for Wooster is gloomy indeed. Another class argue that a high standard is desirable; these gentlemen are prone to speak in doubting tones of the advantage to the profession of a college which, out of a class of eighty, for instance, can send forth eighty doctors of medicine! They stand willing to support the institution that gives the best instruction and has the highest standard. There is no doubt, however, that the body of the profession here are pleased at the action of Wooster, and will support any college that will aid in checking the advent into their ranks of ignorant men, who look upon medicine as an easy trade at which to make money.

In addition to the two established regular Colleges, Cleveland can boast of two hospitals, the wards of which are open for Clinical teaching in Medicine, Surgery, and Obstetrics. These are Charity Hospital, under the control of the Medical Department of the University of Wooster, and the Cleveland City Hospital, managed by the Faculty of the Medical Department of the Western Reserve University. The surgical clinics at these institutions are especially interesting, and are held in amphitheatres arranged for such demonstrations. At the City Hospital, Professor Gustav C. E. Weber has charge of the surgical clinic, and his skill and reputation not only bring patients from all over the country, but are great attractions to students who throng there to hear him lecture. The Charity Hospital surgical clinic is held on Tuesdays and Fridays, by Dr. Reuben A. Vance. At this institution there are clinics of some kind every day. Here Professor X. C. Scott holds his eye and ear clinic; Dr. Miller, his gynecological clinic, and Dr. Burns, his children's clinic. In fact, so far as facilities for clinical teaching are concerned, Cleveland stands first among the cities of the West.

Vigorous preparations are already being made to give the American Medical Association a cordial welcome here in 1888. Dr. X. C. Scott, the chairman of the Committee of Arrangements, is an indefatigable worker, and his efforts will be warmly seconded by every member of the Profession, not only in this city, but in the State of Ohio. The State Society appointed a committee to confer with the Committee of Arrangements, and upon separating, adjourned to meet here at the same time with the American Medical Association. It was suggested that the action of the Association in reference to the Minnesota State

Society at St. Paul be a good precedent to follow in the case of the Ohio State Society at Cleveland. There the State Society met, transacted the necessary routine business, and then, at the request of the Association, adjourned, to enable its members to become "members, by invitation," of the latter. We anticipate a large attendance and a successful session. That many of the readers of the MEDICAL AND SURGICAL REPORTER will visit us next year, and that all will have a good time, is the sincere wish of

MEDICUS.

Cleveland, Ohio, July 7th, 1882.

The Causes of Labor Before and at Term.

ED. MED. AND SURG. REPORTER:—

Various reasons have been assigned, time and again, as to the causes of the onset of labor at term and before, but none have been altogether satisfactory. The theories have lacked practical demonstration. Now I have often thought carefully over the subject, and have finally come to the following conclusions:—

1st. In the event of the death of the fœtus before or at term, be it from either partial or total detachment of the placenta, or any other cause, it becomes a foreign body in the uterus, and as such acts as an irritant to the organ. Let us suppose that the placenta has become detached. The fœtus now loses its nourishment, the oxygenating blood and the development ceases. Acting as an irritant to the uterine walls, the impulse is conveyed by the nerve filaments to the ganglionic centre, whence it is reflected back to the uterus, the result being a contraction. Again, gestation having ceased the uterus is not called upon to expand or increase in size to any greater extent to accommodate its contents, and, therefore, obeys the impulse to regain its normal state and size.

2d. But suppose the fœtus to have reached full term? When the fœtus reaches the end of gestation, and the uterus is distended to its fullest capacity, what causes its expulsion? It is a well known fact that toward the end of pregnancy the fœtus becomes more and more restless than in the earlier months, and at term is not infrequently quite vigorous. The mother is capable of supplying all the oxygen necessary for the proper development of the child up to a late period, when it begins to clamor for more than she can supply: the heart, lungs, etc., have become fully developed and are now competent to perform their functions independently. Development has reached its height, and again, as in the case previously quoted, the fœtus becomes a foreign body. Irritation is set up by the strong movements, and by the same process contraction is induced. In the one case labor is brought on by the useless presence of a dead child irritating the nerve centres; in the other, by a living child, by its restlessness or by encroaching on the uterine walls, doing precisely the same thing.

When the apple is ripe it drops from the tree; it does so because it has reached its maturity and further nourishment is no longer possible nor required. The chick emerges from its shell, it having become fully developed, and, in fact, not

receiving any more nourishment craves for more. The leaf drops from the bough, the sap taking another course after performing its duty. Every thing, animate and inanimate, bows before nature's law of self-limitation.

Philad'a. ANDREW L. WITTKAMP, M.D.

Regular Medicine.

ED. MED. AND SURG. REPORTER:—

At the recent meeting of the Oregon State Medical Society the following resolutions were offered, but not adopted:—

Resolved, That we consider the practice of regular medicine consists, as far as therapeutics are concerned, in the use of every drug, medicine, method, ism or pathy known or supposed to possess curative virtues. "The whole unbounded continent" of remedies is ours, and we are not bound or restricted in our use of any curative measure, or to any exclusive method or medical doctrine.

Resolved, That we do not consider it a violation of medical ethics to consent to assist a patient under the care of a hydropath, homœopath or any other practitioner of a one idea plan of treatment; but should consider any regular physician very imperfectly qualified for his profession, if he ever required the assistance of any of the pathists or irregulars in his management of patients.

C. H. M.

Removal of a Myo-fibromatous Tumor.

ED. MED. AND SURG. REPORTER.

Some few months ago I was consulted by Miss Dennis, aged thirty, medium stature, who informed me that she had had a bloody flux from the vagina for the past four years, and during the menstrual epochs the flow had been alarming, with an accompanying dysmenorrhœa, which anodynes failed to alleviate. Several physicians, including a gynecologist, advised her to be patient, as she was undergoing the ordeal of "change of life," and in due time she would be well. From the history of the case, I suspected that I had to deal with an intra-uterine tumor. My patient was at this time exsanguinated, dyspeptic, and anasarcaous, in a word, bed-ridden, from pain and exhaustion. At the first vaginal examination nothing of note was revealed, save the bloodless hue of the parts. Unable to manipulate with the uterine sound, owing to stenosis, I at once instituted gradual dilatation of the cervix uteri, in order to search for the disease that was rapidly terminating the life of my patient. She was ordered to be kept at absolute rest, in the recumbent posture, her diet to be nutritious, with ferruginous tonics, and the vagina to be tightly and constantly plugged by tampon.

During the following month I succeeded in dilating the cervix to admit the index finger, when I encountered, with the aid of the uterine sound, a growth encapsuled within the fundus and the posterior uterine wall. By the use of the therapeutic measures named a status of health was reached that justified operative procedures. With the assistance of Dr.

E. P. Irons and my student, Mr. Abbott, I proceeded to remove the tumor, after the mode described by Prof. T. Gaillard Thomas in his great work on gynecology (p. 544). My assurance of success was abundant, having at command Prof. Thomas' spoon-saw, my "sheet anchor" in the surgical handiwork. In one hour I was rewarded with the privilege of presenting to the friends of my patient the entire tumor, weighing one pound and three-quarters.

By the hypodermic use of the bi-muriate of quinia for a few days, the temperature was kept within the bounds of safety. In one month from the date of operation her convalescence was speeding into recovery. At the time of writing she is enjoying excellent health, being free from discomfort of every kind.

Baltimore, Md.

G. GLANVILLE RUSH.

A Mistaken Diagnosis.

ED. MED. AND SURG. REPORTER:—

A case of sickness occurred twelve miles from Fort Worth, Texas. A country physician in attendance was asked if the case was not one of smallpox. He, in reply, stated no, that the case was one of extraordinary interest, and without parallel in his whole reading or personal experience. Further, that he would wager that, should Dr. A., B. or C. be called from Fort Worth they would corroborate his diagnosis, which was that the man had "erysipelas from the toes to the knees, measles from the knees to the waist, and seven years' itch from the waist to the top of the head. An intelligent physician being called in readily diagnosed confluent, smallpox. The sequel proved the correctness of the last diagnosis, as several persons contracted the disease. The first physician, to the credit of Texas, is not a native. The last was.

Fort Worth, Texas.

VERITAS.

NEWS AND MISCELLANY.

Singular Legacy to the French Government.

M. Giffard, the well known Parisian inventor of balloons, who died some time ago, has left a legacy to the French Government, under the most singular conditions. He desires that it be devoted to the establishment of *suicidaria*, or national institutions in which persons suffering from painful and incurable diseases may be allowed, by the use of chloroform and other such agents, to shorten their own existences, acting under the direction of medical experts, and with the consent of their friends. M. Giffard secured a euthanasia for himself by a special apparatus he invented for the inhalation of chloroform. M. Renaud has joined the movement for the promotion of painless suicide in France, his only stipulation being that no man shall, by law, be entitled to take his own life, until he has obtained the consent of his friends in what is known as the *conseil de famille*.

The Late Sir John Rose Cormack.

At a meeting of the friends of the late Sir John Rose Cormack, at the house of Dr. Semple, it was decided to organize a committee for the purpose of raising a fund for the benefit of Sir John's family, for notwithstanding the devotion of a long and laborious life to his profession, he has died without leaving any provision for his widow and children. A committee for the same purpose has already been formed in Paris, and subscriptions have been forwarded to that quarter. The London committee consists of Sir J. Risdon Bennett, Dr. Quain, Dr. A. P. Stewart, Dr. B. W. Richardson, Mr. W. H. Michael, q.c., Dr. Thudichum, Dr. McIntyre, Dr. Semple, and Dr. A. Henry, Secretary. Dr. Semple was appointed Chairman of the Committee, and Dr. B. W. Richardson, Treasurer.

Items.

—Dr. George Elder, resident surgeon at the General Hospital, Nottingham, England, has, we understand, just performed nephrectomy for scrofulous disease.

—The Boylston Prize Essay given by Harvard University has been obtained by Th. M. Dolan, F.R.C.S. ED., Halifax, Yorkshire; value of prize \$800, the subject of the essay being "Sewer Gas."

—A whole family, consisting of six persons, living at Murceaux, in the Department of the Seine-et-Oise, have been poisoned through eating poisonous fungi in mistake for mushrooms. Medical aid was sought, but to no avail, and all six died in great agony.

—Dr. Robert Koch, accompanied by Dr. Struck, the Director of the Imperial Board of Health at Berlin, had an audience of the Emperor on June 5, when he explained to his Imperial Majesty the results of his investigations on tubercle, and demonstrated his preparation containing the bacillus of that disease.

—Malarious fever, in an epidemic form, has of late been very fatal in the Mauritius. During April alone, there were no fewer than five hundred and ninety-six deaths, and these, unhappily, included some of the prominent officials of the island. The death rate from fever has been higher than in the previous five years.

—During the last fifteen months, as many as two millions of persons have been vaccinated and revaccinated in the State of Illinois. To this general vaccination is undoubtedly due the small progress that smallpox has of late made in the State—the disease having been, in the majority of cases confined to those first attacked.

—In his cross-examination of the surgeon, the lawyer said that a doctor ought to be able to give an opinion without making a mistake. The surgeon replied, "They are as capable as lawyers." The lawyer said, "A doctor's mistakes are buried six feet under the ground, a lawyer's are not." "No," said the surgeon, "but they are sometimes hung as many feet above ground."

OBITUARY NOTICES.

DR. ALFRED M. SLOCUM.

Dr. Alfred M. Slocum died June 21st, after a brief illness. He was born in Germantown, Philadelphia, December 2, 1822. He studied medicine, and graduated from the University of Pennsylvania in 1847. He was a skillful and thoroughly conscientious physician, but so modest and retiring that his abilities were, perhaps, not as widely understood and appreciated as they should have been. His life record was written in deeds. For one year after leaving the University he was physician at the Wills Hospital. For six years he was resident physician at the Northern Dispensary.

He was, for ten years, visiting physician at the Episcopal Hospital, and for sixteen years at the House of Refuge. He was also visiting physician at the Charity Hospital and the Magdalen Society.

As a member of the Philadelphia College of Physicians and the County Medical Society, he was esteemed by his fellows, and respected alike for his talents and his unvarying courtesy.

Dr. Slocum was never a robust man, and suffered, at times, from disease of the heart; this chronic trouble doubtless being the cause of death. He was a member of St. Philip's Episcopal Church, a true Christian, and an affectionate husband and father.

QUERIES AND REPLIES.

J. C. W.—For the skin troubles arising from poisoning by poison ivy you may use fl. ext. grindelia robusta, tñj to flñj of water, as a lotion, also a saturated solution of hyposulphite of soda. Sulphate of zinc is also good, a few grains to the ounce.

A and B.—B's conscience must be his guide. If he did nothing and said nothing to lessen the confidence of the patient, his family or friends, in A, and acted in every particular strictly in accordance with the ethics governing consultations, then he can and ought to accept the call to treat the case.

MARRIAGES.

ADAMS—SMITH.—At the home of the bride, Berwick, Pa., June 10th, by the Rev. A. B. Smith, brother of the bride, assisted by the Rev. W. W. Evans, A.M., Mr. Louis J. Adams, M.D., of Evansville, Pa., and Miss Clara V. Smith.

BOTKIN—HAUCHER.—At Claysville, by the Rev. A. A. Menley, assisted by Rev. J. L. Leeper, Dr. L. C. Botkin, of Burgettstown, Pa., and Miss Annie C. Haucher, of Claysville, Pa.

CHALFANT—WEBSTER.—June 14th, 1882, by Rev. J. A. Cook, in the Presbyterian church of Jewett, Ohio, Dr. Robert W. Chalfant, of Logan county, O., and Miss Maggie Webster, of Jewett, Harrison Co., O.

FERGUSON—CAMPBELL.—On Wednesday, June 7th, 1882, at the residence of the bride's parents, by Rev. Gracey Ferguson, William Ferguson, M.D., and Mrs. Annie K. Campbell, daughter of John Kitchenman, both of Philadelphia.

DEATHS.

GOLD.—In this city, on the 12th of June, Hiram Gold, M.D., in the 49th year of his age.

SLOCUM.—In this city, on the 21st of June, Alfred M. Slocum, M.D., in the 60th year of his age.

TREVOR.—In this city, on the 18th of June, Dr. M. R. Trevor, of paralysis.